YyPpEe

afterthoughts

Ben Weiner

Learning about drawing type on computer

acknowledgements

(8/12)

contents

note

This book is intended to show Puritan in such a way that its qualities, both good and bad, can be evaluated. So, to accurately represent the letter spacing of the type, I have avoided the usual kerning of headings and displayed words. I have also avoided, as much as possible, reduction of word spacing in text. Variable spacing in justified setting has been controlled by quite restrictive parameters. These are the Quark XPress hyphenation and justification parameters which I used:

1   ranged left (percent of default)

spacing	word	character
minimum	100	0
optimum	100	0
maximum	100	0

2   justified (percent of default)

spacing	word	character
minimum	85	0
optimum	100	0
maximum	110	4

Type size and linefeed for text passages are given in parentheses.

If you spend some time looking at this book, you will become aware of the small discontinuities in the type. For instance, the shoulders on the bowl of the p and the space between F and o, which is too large.

departures ↗
arrivals ➔
transfers ➔

an introduction to Puritan

My work on type designing began in August 1997, which was when I first had the chance to use Fontographer. In other words, I began seriously thinking about type design only after I had the tools to try it on a computer. All the drawing I have done was carried out, from first 'sketches' to the final type, using a computer mouse. My work files consist of the computer printouts I made while working on the type, plus the pencil and pen sketches which were done while work was in progress.

Puritan originated as a set of rough outlines which I imported from a drawing program into Fontographer. These rough drawings showed a Gill-like typeface, but one which I decided I wanted to look a little less 'noble' than Gill; a little softer. The resemblance which the final typeface bears to faces like Syntax and Stone is probably as a consequence of this. Ehrhardt, a Dutch old face type, I also kept in mind; its lean, dark and condensed letters strike an interesting balance between motion and stillness.

For a while, the type had features which were taken from utilitarian letters such as those used on British road signs (the 'Transport Alphabet'):

I tried a hooked lowercase i and l and an i similar to that in the typeface Meta. But ultimately, my design is less showy than these; as the detail issues presented themselves, I realised that there was enough work in resolving those to keep 'surface' additions at bay. And I decided that I did not really like the hooked l outside its use on road signs, regardless of the difficulty it presents in determining character spacing.

The creation of Puritan was an opportunity to learn how to use the tools of Fontographer, and it was also the chance to see where my preconceptions about typeforms would lead. Thinking that it would have an impact on what I was doing, I avoided looking at Syntax too often. And the oblique terminals on letters like x, y, w and v were similar to Syntax already. As I mentioned, I sought a form which had echoes of Ehrhardt. Syntax was a Garamond-style type: much more generously proportioned, and much less vertical. After I'd progressed to a certain point, I tried combining some Ehrhardt with some Puritan: needless to say, the x-height (not to mention the ascender height) was significantly

different, and overall the combination was not a happy one. But then again, I only allowed the references I made to remain in the back of my mind, and I did not consciously borrow details directly from any existing typeface. Therefore, any close resemblances which do exist are there almost by chance.

I finished work on Puritan in October 1999. This allowed me to submit the face to the International Type Design Contest run by Linotype Library. To make it eligible to enter the text type category, I had to supply Puritan as a family with four weights of type. Sanserif typefaces are often quite amenable to being turned into families, because they can retain their character despite considerable distortion of the outline I created a bold and an italic by modification and substitution of the existing characters, and I brought in a previous, narrower version of the type as the condensed weight. This means that at the moment the Puritan family consists of four weights. However, the regular weight is definitely the most refined of the four. The others represented an additional burden which had

to be quickly dealt with in time for the competition deadline: nevertheless, I'm quite pleased with them.

This book gives a personal account of the ways I thought about type, the ways I approached the task of creating a typeface, and the insights I gained in the process. Therefore, while it is not exhaustive, it details some of the issues which surround type design in general, and some of the issues unique to drawing on-screen. I discuss the reasoning and the influences which shaped the way Puritan looks now, and the ways in which it changed as it developed.

This book forms a kind of specimen for Puritan. Rather than present the type as a rarified object, I prefer to show it in simulated use, so that you can see the kinds of tasks I hoped it might be suited to. You may decide that, at least as I show it, the face is not capable of handling such a wide range of tasks equally well. But it's also an opportunity for me to speculate about what might be possible. And as I have set the entire text in Puritan, you can consider the old question of whether sanserif type does work in extensive continuous text.

(13/18)

using Fontographer

Figure 1 [below] Fontographer displays the entire typeface as 24-point bitmaps held in something reminiscent of a rack of pigeonholes.

Figure 2 [right] Characters are edited in a resizable window; they can be enlarged greatly to assist in moving the control points and curve handles. Control points are the black squares around the edges of the character, anchoring the curves; curve handles the black crosses at the ends of the lines projecting from control points, allowing the gradient of the curve to be altered. In general, the fewer control points the better: the result will be less prone to lumps and the letter shape is simpler for the computer to draw. Here, B has two rather close control points on the top edge.

Both screenshots are shown reduced to 50% of full size.

(8/10)
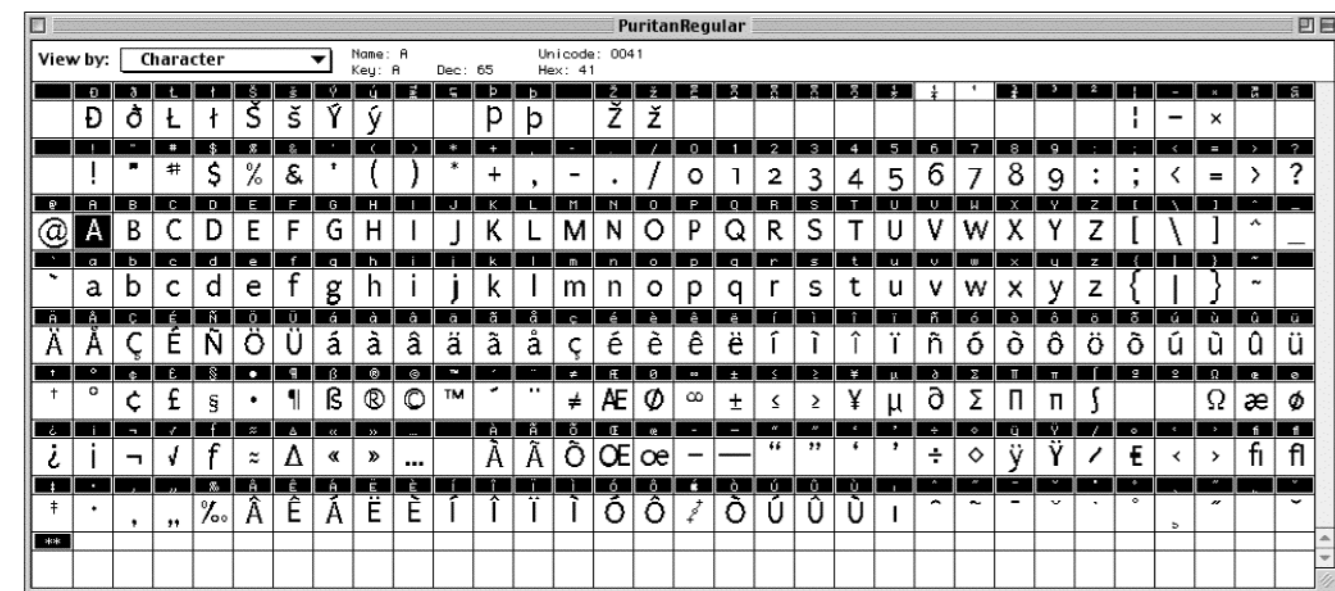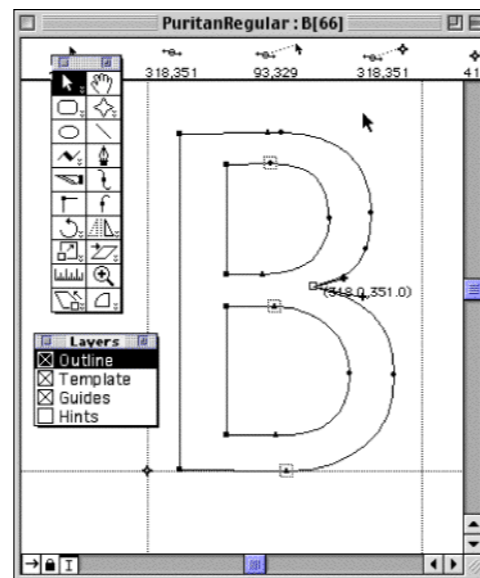
In creating Puritan I was not only fiddling around with a computer; I was also wasting a lot of time. So what was the incentive? Beyond the acquisition of a certain amount of familiarity with Fontographer, I also stood to gain some insight into the issues of shaping letterforms. Fontographer allows you to open up existing fonts; I used this ability to look at existing fonts. This allowed me to see where the experts had chosen to put their control points (the places where the lines making up the character's outline join) and to crib ideas about how to deal with the junctions between characters. These told me about how uniformity in stroke width was implied even when there was simply no way this could be true. Gradually, I learned; Figure 4 shows some of the gains I made in control over the shapes of the characters.

As a novice, what was not apparent to me was the intriguing balance between getting a single feature of a character right and getting the whole character right. It's a balance over which ultimately some external force seems to have control, and sometimes the struggle has to be abandoned. Sometimes a different style of character may provide the solution; at a later date, when the typeface as a whole has advanced, the original style of character returns and works well after a little judicious modification.

Fontographer is an excellent program, especially given the limited size of its market sector. It rewards patience in learning with some very good drawing tools. Much better, I feel, than at least one mainstream drawing program. But that cannot change the fact that it is abstracted from the real world; you have

to interact with it via the mouse and the keyboard of a computer, and your commands must be dealt with inside a whirring box which, in many cases, can't be casually moved about or taken to a comfortable chair. When working in the way I chose to, from sketch to final type entirely on-screen, you are at the mercy of the machine. With no original drawings on paper to amend, you can't use a pen or some white paint to solve a problem. This I knew academically at the outset; by the time I had finished with Puritan I knew it as a familiar and constant frustration, but something which I could work around.

Another thing that Fontographer won't do is provide a particularly faithful representation of your type on-screen. It looks the same, but it isn't. The screen resolution is simply too low to reveal small flaws in the outline, even when

the character is greatly enlarged. Yet the same flaws can be seen on high-resolution printouts when the characters are much smaller. Thankfully, a decent laser printer can fill in the gap, and a newly generated font can be put into the computer's font folder and tried out. Nevertheless, this delayed feedback contributes greatly to the strangeness of drawing at a computer.

I don't think that Puritan's letterforms reflect their all-digital heritage. Sure, they have little lumps here and there (which I'm leaving now that I've finished working on the font). But lumps can be found in fonts created from scans. The regularity in outline I eventually achieved is due to my efforts in refining the variable-quality first drawings, rather than because the software magically smoothed the rough edges for me.

(11/14)
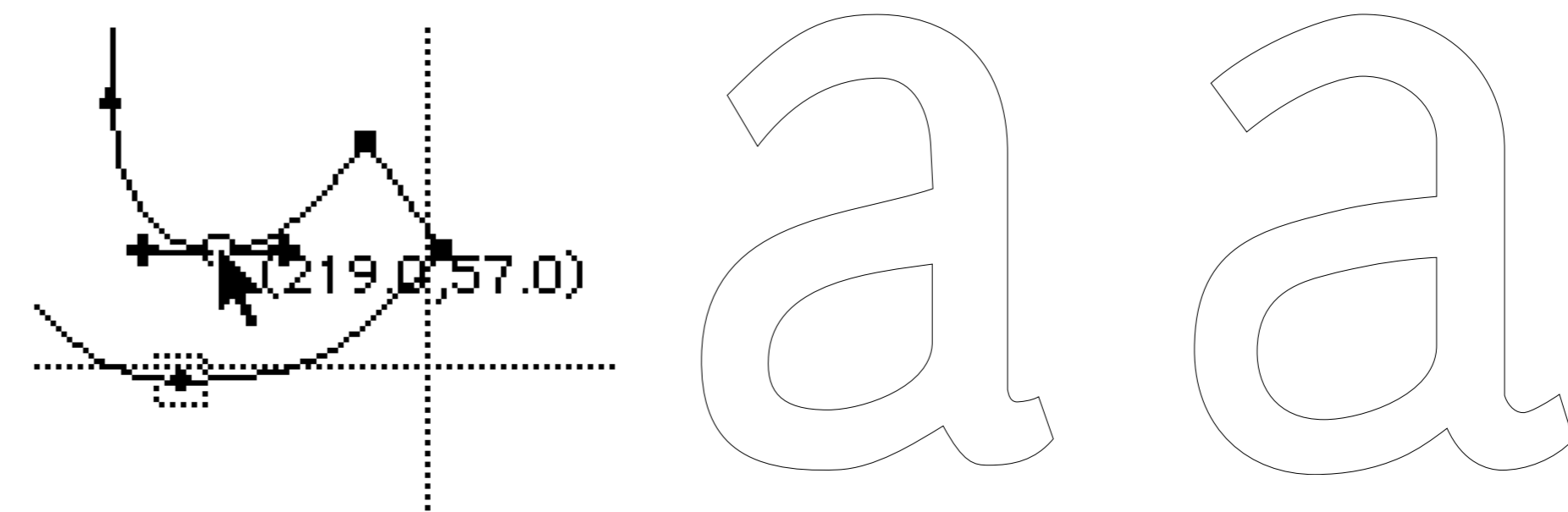
Figure 3 [left] To change the shape of a character, you must manipulate the outlines by dragging either the line or one of its defining 'control points'. Theoretically, all your curves are smooth, mathematical vectors. But this in itself does nothing to make them neater; curves which adjoin must meet at exactly the same angle to avoid steps in the outline. It's also easy to create lumps where the control point handles overlap. At the resolution of the screen, such lumps are often hidden.

Figure 4 [centre] This early version of the letter a is supposed to be subtly sculpted, but in fact it's rather crude and lumpy.

Figure 5 [right] The current version is not perfect, but the modulation of stroke widths is several degrees more subtle and controlled.

(9/12)

development

Map (left):

Blaenrhondda
Blaencwm
Treherbert
Ynyswen
Treorchy
Ton Pentre
Ystrad Rhondda
Llwynypia
Tonypandy
Dinas
Porth
Trehafod
Pontypridd
Trefforest
Trefforest Estate
Taffs Well
Radyr
Danescourt
Fairwater
Waun-Gron Park
Ninian Park
Grangetown
Cogan
Eastbrook
Dinas Powys
Cadoxton
Barry Dock
Barry
Barry Island
Llantwit Major

Rhigos Hirwaun
Maerdy
Ferndale
Tyloestown
Penrhiwceiber
Abercynon North
Aberdare
Cwmbach
Fernhill
Mountain Ash
Merthyr Vale
Quaker's Yard
Abercynon South
Coryton
Whitchurch
Rhiwbina
Birchgrove
Ty Glas
Heath Low Level
Llandaf
Cathays

Merthyr Tydfil
Pentre-bach
Troed-y-rhiw

Tredegar
Rhymney
Pontlottyn
Tir-Phil
Brithdir
Bargoed
Gifach Fargoed
Pengam
Hengoed
Ystrad Mynach
Llanbradach
Aber
Caerphilly
Liswane & Thornhill
Llanishen
Heath High Level

Cardiff Queen Street
Cardiff Central
Cardiff Bay
Dingle Road
Penarth

to Brecon
to Bridgend, Maesteg, Port Talbot, Neath and Swansea
to Newport, Bristol and London
to Bridgend

Rail/bus links
Stagecoach bus service
Brewers bus service
Park & Ride
station with booking office (opening hours vary)
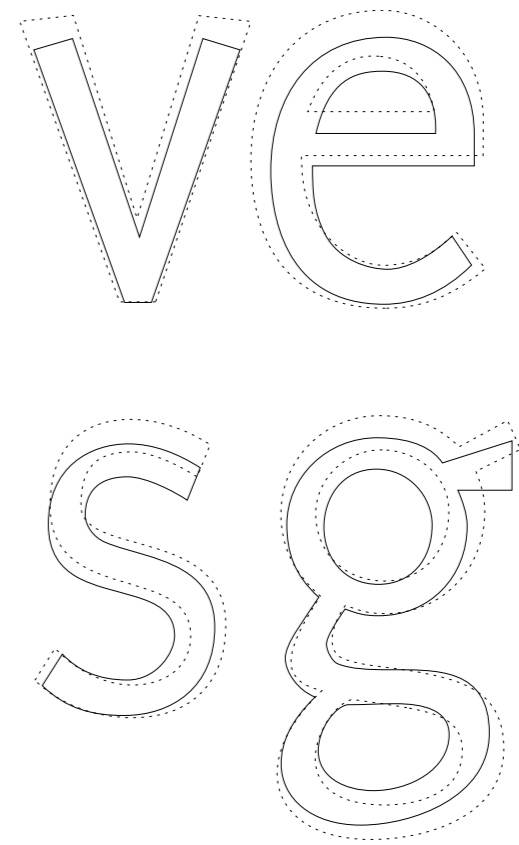

August 1997

October 1999

Figure 6 [left] Nine stages in the development of Puritan. The changing R and g show how my concept of what forms were appropriate altered while the type was in early development, while the a and i show variations in detail. Overall, the first few versions of the typeface were a stylistic mixture; the design had yet to achieve an independent and cohesive identity.

Figure 7 [below] The lighter outline is an earlier, slightly larger version of Puritan. The refinements to the consistency   of line width and the greater 'confidence' of the g exemplify two kinds of improvement I had made between the two versions.
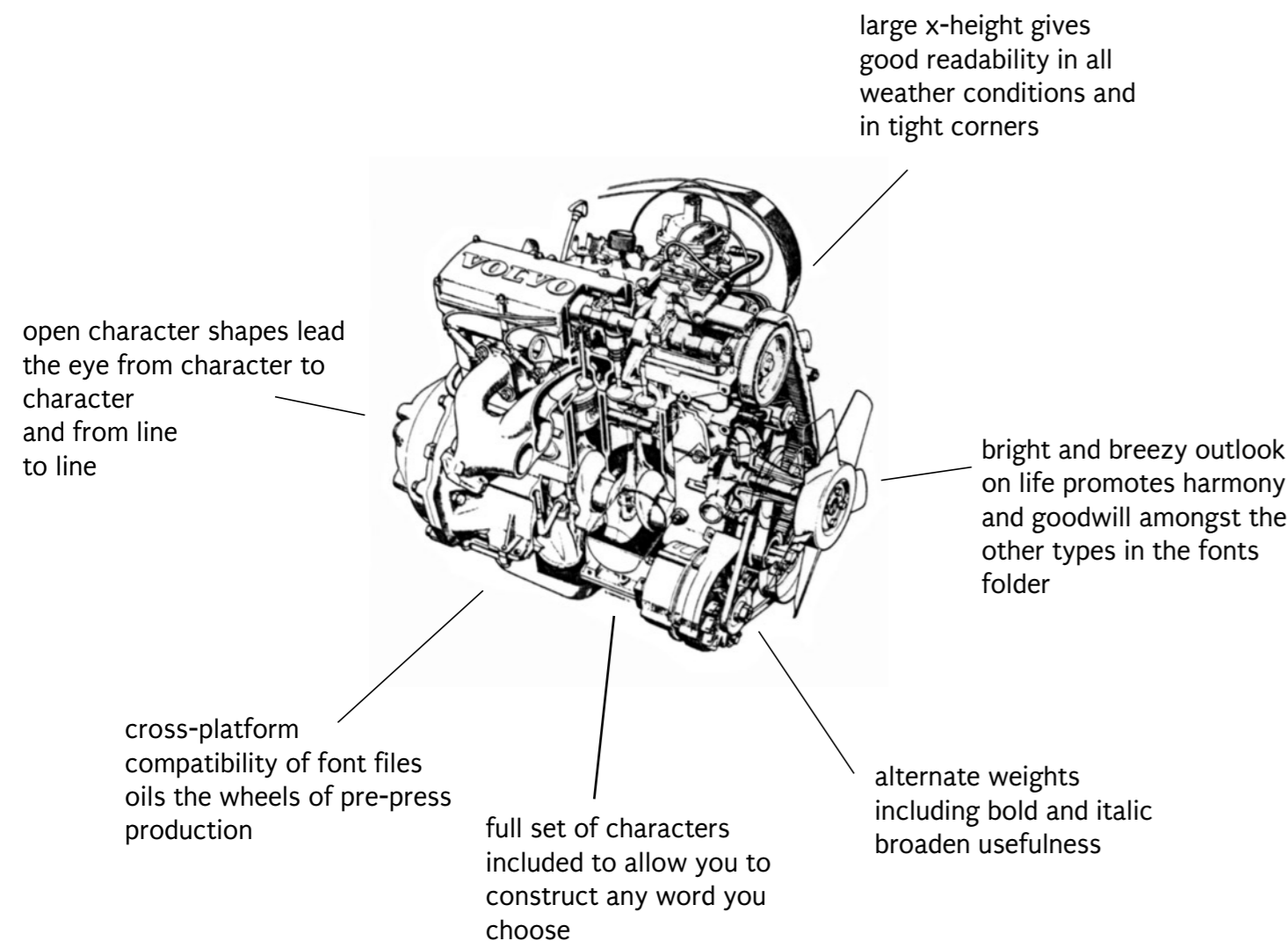
(9/12)

Puritan was the result of my first ever attempt at making a typeface. In some respects, this naivety is still visible, so many generations on. I am satisfied that Puritan's development is over; the typeface contains many lingering signs of my inexperience, and leaving it in a state of relative completeness allows me to start again without feeling that I have left basic work undone.

The figures on this page show some of the stages which Puritan underwent between August 1997 (when I installed Fontographer on my newly-purchased computer) and October 1999 (after that machine had died – did I ask too much of it?). In Figure 6, I show four characters – R, a, g, i – which seemed prone to substantial alteration. I think that along with the changes in the overall shape which these characters undergo, the gradual improvements in consistency and confidence of my outlines are visible. Slightly confusing the issue is the fact that between the fifth and sixth stages of figure 2 I realised that the type was a little big on the body (rather an insult in typographical circles: it's like being 'big-boned') and so I slightly reduced the overall size, while keeping the spacing as it was.

Having filled the empty 'pigeonholes' (see Fig.1) in Fontographer's database, the changes I subsequently made were intended to bring the various letter-forms closer in style; they needed the almost indefinable unity of style that allows the interested observer to remain satisfied that the typeface is not being changed from letter to letter. There are obvious ways to achieve this: for starters, keeping the x-height consistent is a good idea, though even this is not easy to achieve. Very soon you become aware that the appearance of letterforms at small sizes and in groups is very different from the look of the same letterforms when shown large and isolated. The luxury of seeing the character on which one is working at the equivalent of 1,000 points is traded off against the need to make extensive investigations into the effects of extreme reduction in size.

Some of the glitches which are still left in Puritan remain because effectively they are invisible at small sizes. Some are due to the vagaries of laser printers, and only show up at small sizes.

(10/13)

5

large x-height gives good readability in all weather conditions and in tight corners

open character shapes lead the eye from character to character and from line to line

bright and breezy outlook on life promotes harmony and goodwill amongst the other types in the fonts folder

cross-platform compatibility of font files oils the wheels of pre-press production

full set of characters included to allow you to construct any word you choose

alternate weights including bold and italic broaden usefulness

The elements of the new **Puritan Word Construction Set (15)**

behind the scenes

Special Sorts

The 'glory' of type design lies in the infinite subtleties of the fifty-two letters of the alphabet, upper and lower case, plus any ligatures, the numbers nought to nine and the ampersand. Over these characters the greatest amongst historicist typographers, such as Bruce Rogers and Stanley Morison, could wax lyrical. Indeed, their careers depended to a large extent on being type impresarios. But those fifty-two letters, and the other dozen or so characters which are of natural interest, are only a subset of the whole typeface. In the computer, a typeface is typically represented by digital font files of 256 (two to the power of eight) characters; this number fitted nicely into the eight-bit mentality of software engineers (in fact, it is double the original number allowed, 128). The 256 character set is necessarily a subset of the full range of special characters which might be needed, but it still leaves plenty of pigeonholes in Fontographer's database empty for the designer to fill.

Happily, a large number of the holes can be filled, almost instananeously, with accented alphahabetic characters; the rest are a ragbag of mathematical symbols, currency signs and odd bits which nobody ever needs until the type designer leaves them out. And to draw all of these is a tall order, because in many commercial fonts they will be found to be generic; possibly

tweaked a little, but nonetheless rather unlike the rest of the font. So the idealistic type designer must decide whether to compromise principles or to plough on into the obscurities of good logical-operator symbol design.

Fuelled with the enthusiasm of an amateur, I tried it; but I don't think the results will win many admirers. I show the special sorts in my specimen, but they are no better now then they were when I drew them. And it has to be said that I never believed I was creating type for the next edition of Wittgenstein or Dirac.

Spacing

Another important element of the design, substantially invisible to the viewer, is the spacing between the characters. I was drawing quite a condensed sanserif typeface; therefore it could reasonably be assumed that the letterspacing would be quite narrow, as indeed it is. Behind that fact lies the struggle to achieve even spacing, one which can never be resolved in practice. But I wanted to avoid unnecessary kerning pairs (instructions to reduce or enlarge the space between two specific characters), and that meant taking a lot of trouble over the space between each character and the invisible left and right boundaries which enclose it. There are gaps and oddities in the final result; some have in fact been resolved by adding a kerning pair within the

font. Others (the less obtrusive or rarely-occurring ones) I left, rather hoping that they would add a little life to the type. (see Figure 11)

Bitmaps

Decent bitmaps are a third essential provision for a digital typeface. Bitmaps are the images which are used to represent the type on computer monitors, and they are typically hardest to discern when they are at small sizes, because there are only a handful of pixels available to define each character shape. While it may be true that the age of bitmapped type will soon draw to a close, it is still a little unfair to leave those who live in the dark ages of contemporary software (at least, at the time of writing) for showing type on screen with only the crudest, blocky images to work with. Above a displayed size of about 24 points, the bitmaps which Fontographer generates automatically are very good, although they can be manually improved to give a clearer image. At sizes of eight and ten points, it is essential to work on the bitmaps by hand, and this I did. So should a document be typed in with the font set to Puritan, the letterforms should prove quite legible.

Incidentally, I noticed in preparing this document that the bolder weight of Puritan, **Puritan Black**, still hasn't got its own, proper bitmaps ...   (12/15)

to work on the bitmaps by hand, and this I did. So should a document be typed in with the font set to Puritan, the letters might not prove totally inscrutable.

be typed
set to Pur
might no
inscrutab

Figure 8 bitmapped type as shown on-screen (12 points)

Figure 9 enlarged four times to show the limited number of pixels available to form the character shape. Each black square is one pixel, so the a is six pixels high by five wide.   (9/11)

influences

www.rdg.ac.uk/~ltu96abw/

Extra-curricular activity

(12/14.5)
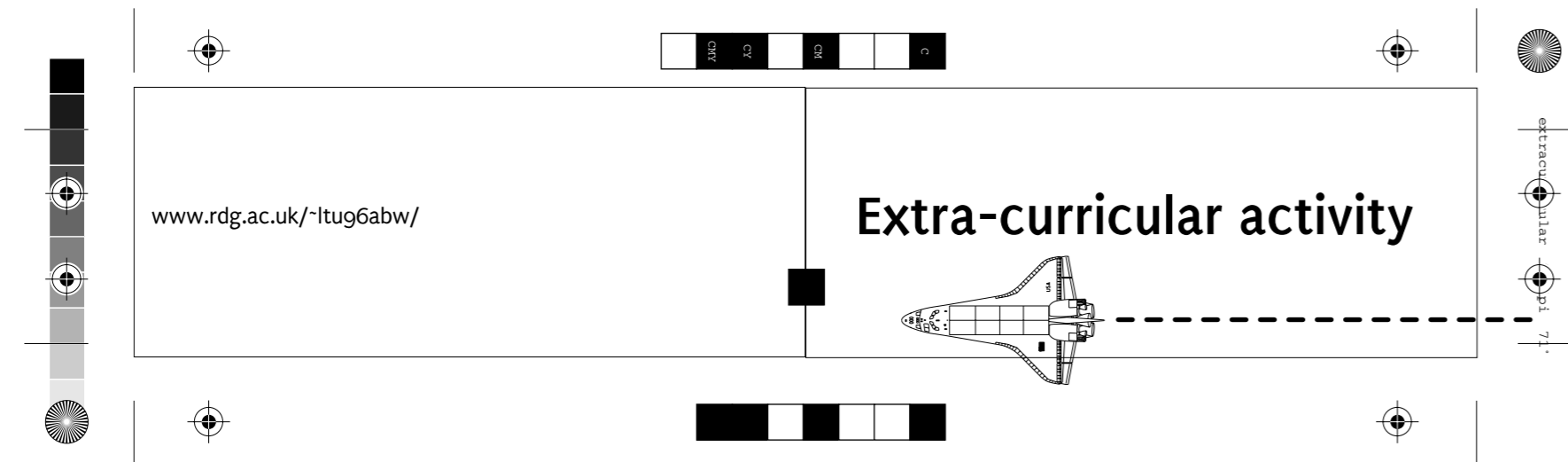
average | Bloemenhuis
average | Bloemenhuis
average | Bloemenhuis
average | Bloemenhuis

Figure 10 Ehrhardt at 30, Puritan at 29, Syntax at 28, and Swift at 27 points (8)

angnmnhnenonjnxninbnpn
AnEnOnHnKnGnBnWnJnMn
oeoaocogopoqodowoxono
HAHGHVHIHDHLHOHPHRHU

Figure 11 Character spacing is quite tight; the example above is 40 point Puritan ranged left and set solid (8)

While I worked on Puritan, I tried to avoid looking at type I thought was similar in outline, particularly Ehrhardt and Syntax. But they remained in the back of my mind, and I think that Figure 10 shows the similarity in 'set' between Ehrhardt and Puritan (the condensed letterforms and the g in particular) and the similarity in style between Syntax and Puritan (the angled terminals to slanted strokes, for example).

In more specific terms, the similarities between the four types shown here centre around the treatment of individual characters and kinds of stroke shape. I borrowed the triangular hook from Swift, and along with Ehrhardt and Swift Puritan has an upswept lower bowl on the g. I felt that the sloped bowl on the g of Syntax makes a rather uncomfortable break in the baseline of the type, so I avoided it. It's also more closely associated with Garamond-style typefaces than with the more northerly typefaces of the Low Countries. When conceived, Syntax was intended to have this Garamond-like appearance, and this is also apparent in the more generous width of the type, although the two sanserif faces share quite a narrow set.

Serif type is naturally held together by the serifs which run along the baseline, and these serifs play a part in establishing the spacing between characters. Because there are no connecting lines between them, sanserif characters tend to need to stick closer together to give an equally 'connected' appearance, and this is reflected in both Syntax and Puritan.

All four faces share in having an oblique stress; that is, they don't appear to stand square. For example, the arches at the top of m and n seem to point up and to the right. This characteristic is natural to Ehrhardt, since it is a direct revival of a type drawn when obliquely-stressed letters (mimicking the strokes of a broad-nib pen) were the orthodox form. In all three other cases, the oblique stress is a conceit, because all the other three faces are entirely products of the second half of the twentieth century. Puritan gives the least evidence of the oblique stress, but in some respects it is enough that the a has a crooked top and the g a slanted bottom. But the stress is there, in characters such as the e and the s, which have open ends at a relatively gentle angle. Detracting from this old-face character are the very high and almost symmetrical arches of h, m and n; these are resultingly rather weaker in character.

The capital letters are comparatively modest in height, a fact which is not only the result of the large x-height (and short ascenders) but also of their being slightly shorter than the ascenders of the lower case. This has meant that the capitals are also quite narrow, which helps avoid them looking too squat. And also following in a tradition of old typefaces, they are rather heavier than the lowercase letters (the strokes are slightly thicker).

All these characteristics help show how my ambition to make a typeface which was intentionally a little primitive, but still clean and clear, was realised. I was reacting against the superficially sophisticated and self-assured character of faces such as Univers and Scala, but still trying to obtain some of the considered letterforms and consistency of outline they have.

(12/14.5)

Putting type onto a background which makes it particularly difficult to decipher is an unpromising method of proving the efficacy of that type. This 1200 dpi, 141 lpi laser tint is 60% black.

Putting type onto a background which makes it particularly difficult to decipher is an unpromising method of proving the efficacy of that type. This 1200 dpi, 141 lpi laser tint is 60% black.

Putting type onto a background which makes it particularly difficult to decipher is an unpromising method of proving the efficacy of that type. This 1200 dpi, 141 lpi laser tint is 40% black.

Putting type onto a background which makes it particularly difficult to decipher is an unpromising method of proving the efficacy of that type. This 1200 dpi, 141 lpi laser tint is 40% black.

Putting type onto a background which makes it particularly difficult to decipher is an unpromising method of proving the efficacy of that type. This 1200 dpi, 141 lpi laser tint is 20% black.

Putting type onto a background which makes it particularly difficult to decipher is an unpromising method of proving the efficacy of that type. This 1200 dpi, 141 lpi laser tint is 20% black.

the character set
(at 48 point)

What about ligatures?

Ligatures are groups of two or more letters which have been drawn as a single, composite character. I decided that I would draw ligatures. But in the context of a sanserif face they seem odder than the alternative, which is to accept rather tight combinations of f and i for example (the top of the f meeting or obscuring the dot of the i). Since in Puritan the respective characters do not overlap, it was in the interests of experimentation that I drew fi and fl. Digraphs such as æ and œ are not required for English setting, but they do form integral components of other languages in print, so they're worth drawing. Being regarded as letters rather than combined characters, they also have upper case forms: Æ and Œ.

(10/12)

ABCDEFGHIJKLMNOPQRSTUVWXYZ Æ OE

abcdefghijklmnopqrstuvwxyz æ œ fi fl ß

ÁÀÂÄÃÅ Ç ÉÈ Ë ÍÌÎÏ — ÓÒÔÖÕØ ÚÙÛÜ Ÿ

àâäãå ç éèêë í ì î ï ñ óòôöõø úùûü ÿ &

!"#'*,./ {|} () [\] 0123456789 :; <=>?@ §•¶

€ £ $ ƒ • ¢ † + - ≠∞±⌦¬√ ≈÷◇∕Δµ∂ΣΠʃ Ω %

‰ ¿¡ « » , „ … –— " ' ' ‹ › ‡• ⚥ ®©™ ^_`

"You are old, Father William," the young man said
    "And your hair has become very white;
And yet you incessantly stand on your head—
    Do you think, at your age, it is right?"

"In my youth", Father William replied to his son,
    "I feared it might injure the brain;
But, now that I'm perfectly sure I have none,
    Why, I do it again and again."

"You are old," said the youth, "as I mentioned before.
    And have grown most uncommonly fat;
Yet you turned a back-somersault in at the door—
    Pray, what is the meaning of that?"

"In my youth", said the sage, as he shook his grey locks,
    I kept all my limbs very supple
By the use of this ointment—one shilling the box—
    Allow me to sell you a couple?

"You are old", said the youth, "and your jaws are too weak
    For anything tougher than suet;
Yet you finished the goose, with the bones and the beak—
    Pray, how did you manage to do it?"

"In my youth", said his father, "I took to the law,
    And argued each case with my wife;
And the muscular strength, which it gave to my jaw
    Has lasted the rest of my life."

"You are old," said the youth, "one would hardly suppose
    That your eye was as steady as ever;
Yet you balanced an eel on the end of your nose—
    What made you so awfully clever?"

"I have answered three questions, and that is enough,"
    Said his father, "Don't give yourself airs!"
Do you think I can listen all day to such stuff?
    Be off, or I'll kick you down-stairs!"

Lewis Carroll

(9/11)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (6/6)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (8/8)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (8/10)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (10/12)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (12/14)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (14/16)

The only real way to travel in style this year is on the back of a Shetland pony. (16/18)

Larger and larger text; greater and greater leading, longer and longer measures. This

sample setting

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (6/6)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (8/8)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (10/10)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may. (12/12)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may. (14/14)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (16/16)

Larger and larger text; greater and greater leading, longer and longer measures. This is 24 picas, set solid.

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (6/8)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (8/10)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (10/12)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may. (12/14)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may. (14/16)

The only real way to travel in style this year is on the back of a Shetland pony. Connect the two green wires first, then the three brown ones. Only then is it safe to touch the yellow square in the centre of the dial. If you touch it before then, the little spots may come off. (16/18)

Larger and larger text; greater and greater leading, longer and longer measures. This is 24 picas, with 2 points of leading.