The Tightrope Walker, by Paul Klee (1923)
Scottish National Gallery of Modern Art
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Models & Constructs
: margin notes to a design culture

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This book belongs to a series begun by *What is a designer*, concurrently reissued in a third edition. That slightly off-beat textbook spoke to (and from) an academic background upon issues of concern to designers, and upon the requirements of understanding and technique for design practice. The series is expected to continue into more technical areas with books on timber and product design.

*Models and Constructs* is another thing altogether. It is a book for makers – makers of artefacts in all fields – and perhaps for some designers, particularly architects. It is also the only personal book in the series, illustrating and discussing very directly my own work and experiences as a designer, craftsman, and poet. ‘Construction’ is probably the unifying discipline. However, and despite some evidence to the contrary, the book is far too selective to qualify as a work-fixated autobiography. Although so personal, it is structured around some loosely defined themes of more general interest (see above); perhaps, as will appear, in a musical way. Such ‘themes’ are never confronted directly, or made explicitly available, but they are there all right, nudging the text along.

If there is method in this madness, as I believe there is at a subterranean level, poets may make better sense of it than most designers; but the book does offer one service of value to the design professions, even though much of the work here, and the thinking surrounding it, is outside the range of normal commercial interest.
There are real distinctions between academic discourse and the practice of design — as is well known — but also between both of these and the world of the producer, whether in the studio or workshop or on the factory shop floor. Such distinctions do, I think, emerge plainly enough — and almost without trying — in a book of this kind. There are also interesting consequences for the relation of words and things, both in models and constructs.

Distinctions belong with this book; definitions — on the whole — do not. By way of introduction, however: a model is seen as a prompt or stand-in for a construct, whether in a high-flown way (that is to say, inspirationally), or at the humbler level of diagnostic analysis. There are many kinds of model, but here a model is generally held to discern, examine, propose, or illustrate a possibility; a ‘construct’ to occupy and realise it. The one, therefore — on this distinction — is propositional by nature; the other, exhibitive. Or to be more committed about it, the one is extrinsic, and the other intrinsic.

Elegance in the way a construct is conceived or put together will tend toward self-sufficiency. Fruitfulness — a higher claim — will look outward; in which regard a fruitful construct will also appear as a model, an exemplar of attitude or outcome — but always inviolably on its own ground. Such modelling by a construct will never, by my reckoning, properly function as a precedent, as in case law, or bad architecture. The more splendid and inspirational the construct, the more likely is this to be true. One thing does of course grow out of another, ‘precedently’, but the groundwork for this occurrence belongs with the modelling process and not with any construct that has gone further to realise its own unique potential. If these distinctions seem quite unwarrantably obscure, readers may be reassured: not only is there worse to come, but all of it is harmless, and unlikely to threaten anyone’s safe passage through any argument encountered. Readers will be encouraged to think through their own distinctions; and to make them.

The subtitle to Models and Constructs — ‘margin notes to a design culture’ — may be seen as a mild provocation, as elective affinity on my own part, as an effort of distancing from the Britain of 1989, or as a claim to the only territory presently habitable. It is probably all four. A few words will colour in the outline.
In this book, then, the margin occupies the page to which – upon which – it is normally an outrider. It is customary to underestimate the margin. Naturally I would have to think so. Certainly it gets a bad press: consignment to the margin is expected to render a consideration, or a person, as ineffectual as would their banishment to Siberia. Yet as a metaphor of a certain kind of social interaction the margin can hold our interest, I believe. How might this be?

To start with, the marginal position should not be mistaken for plain dissent, which in terms of ‘stance’ or ‘posture’ often merely inverts what it dissents from, and re-institutionalises; nor does the margin involve secession (or even countenance it). Margin dwellers are balancers, contributory yet withdrawn. Bridges may be built there, or ropes thrown across, though more often, connections are merely pointed to; alternatives weighed and canvassed; sources noted. The line that divides the margin from the text is more than one of address and identity – there is usually an economic barrier – but it is wise to remember that the margin needs its text. Forgetful of this a margin is apt to become a chasm. The dweller who dozes off may topple, like Humpty; and an ambitious loner who takes flight, like Icarus, may have even further to fall. The margin also has its tightrope walkers, balancing impossible clusters and complexes of considerations and counter-considerations; doing it the hard way; but no doubt the text has them too.

Recognisably the expertise of a marginal is apt to be narrow but deep; a feature that suits their habitat; but of course when the marginals find the text wholly unacceptable they will tend to develop their own pursuits in some depth, cramped as they are for working space. This always shows, even when rationalised as minimalism. On the other hand a margin’s interactive function – even if temporarily suspended – is actually its saving grace, and can out-perform any Debray-like parallel structure, which has no declared relative scale, or means of crossing over. The margin does not hesitate to foray into the text when its offerings otherwise go unheeded, or when food is scarce. There can even be frivolity, and an exchange of artefacts. The Citroen 2CV, for instance, plainly a margin vehicle – it has that narrow look, and the conceptual rectitude – was of course designed for the text, and is somewhat uneasily back there in a renewed lease of life.
In sum, therefore — and not to stretch this line of thinking too far — the margin may be a place of relegation, or of voluntary exile, but for those whose natural habitat it is (and I speak of my friends), this is one place for active people to be. There are others.

Small workshops of every kind are almost by definition economically marginal, though not always productively so. They neither enjoy nor suffer the conditions for academic subsidy. Here, however, the workshop door is opened by the one academic intrusion into this book: a talk given to students of the John Makepeace School for Craftsmen in Wood. Since this was solely concerned with the design of my own machine toolrack (the audience was a captive one) its presence seems allowable. The talk also serves to connect with the world of *What is a designer*, being on the one hand a fairly cool piece of design analysis, and on the other, certainly personal enough.

Less acceptable to some, may be the verse-sequence, word-forms, poetry — call it what you will — under the title *Inquest of Icarus*; though I have to say at once that in my understanding of these things a poem is hardware as much as any other construct (and has to exhibit a certain order of toughness, or stress-resistance, in keeping). Despite its composite appearance the Icarus sequence is actually one work, and its bits and pieces have no independent status except where self-sufficiency, or the desire for it, is in large part their theme (as in ‘1st time in / an ABC’, or ‘Fisherman’). The work was chosen for the same reasons as everything else, but with two extra advantages with respect to the literary content, which might otherwise baffle or dismay a design reader. The first is the play between words and things, and the fairly accessible design thinking that ensues — though I must emphasise that this is not a ‘mixed media’ work; it is a primary script with isomorphic reinforcement (hence its availability to the printed page). The second is that this is a public poetry, whether for crying out loud or little more than audible, and the issues addressed are of a public rather than a private character; which may again help to redeem such hermetic features as it may (otherwise) be found to possess.

It would seem — otiose? — to cap anything so down-beat as the fall of Icarus with sentiments more conventionally cheerful, though I had hoped to include two contrasting sequences, ‘Making’ and ‘Breaking’. In the event only four pages are available, so I have used them for the
short work 'Retrospects of love'. The whole of this book is, of course, a retrospect. This must be so, even if—as a construct in its own right, or as an interim report-back on findings and leavings—it doesn’t feel that way to me. In fact the added poems do have some allusive relation to the Icarus theme. There is certainly nothing too cheerful about them, either, but when it comes to misfortune in love it is probably better to do the thing thoroughly (yet live to tell the tale).

Although words do feed upon words insatiably, readers have been spared a textual analysis of *Inquest of Icarus*. There are, however, quite lengthy extracts from the performance notes—a slim volume presented to the audience with the separate script. Originally these included the detailed instructions for building the hall, or enclosure (appropriately, there was no roof, perhaps to allow Icarus—reversing order—to fly back in), advice on speaking the parts, drum and lighting scores, and so forth. Here I have confined the notes to one of their functions as commentary upon the script and its context in performance. Obviously the script can be taken neat, without these embellishments. They do, however, draw together some threads of connection with thematic material elsewhere in the book, and they add, I suppose, a design interest. Those who find it a distinctively contemporary practice to accompany some modest artefact with a self-critical commentary of more than twice its own length, should take note of James Joseph Sylvester (1814–97):

‘At the reading, at the Peabody Institute in Baltimore, of his Rosalind poem, consisting of about 400 lines all rhyming with “Rosalind”, he first read all his explanatory footnotes, so as not to interrupt the poem; these took one hour and a-half. Then he read the poem itself to the remnant of his audience.’

Juxtapositions of the kind presented here are not too common in English cultural life. The last major critic to find them congenial, let alone necessary, was Sir Herbert Read (but who admittedly felt constrained to write a pamphlet called *To hell with culture*). The fact is, many literary people are bat-blind to much that is discussed in this book. Many designers, it must then be added, confine their reading to trade catalogues (and their writing to attacks on modern architecture). It might seem, therefore, that I am asking the congenitally sightless to join hands with a bunch of illiterate philistines, to no obvious purpose.
Fortunately it is only half as bad as that in Eng. Lit. England, though the visual/literary split does seem to go deeper than the better known (and rather specious) arts/sciences divide. It could be argued of course — not here — that a distinctively literary culture becomes creatively preoccupied with pattern (as a depth analogue) rather than form, and that the writers’ writers, such as Proust, Henry James, and Joyce, showed the way. However, for my part — and I suppose as a non-literary contributor — I can see no reason why anyone willing to hold forth — say — on the state of literature in France or Germany between the wars, should not turn with alacrity to half an hour’s close critical commentary on the Villa Savoye. If such a view is eccentric, a few more books like this one should make it less so.

Equally questionable, perhaps, is my decision to include things done yesterday alongside jobs of 30 years ago. There are considered reasons for this somewhat alarming departure from accepted practice. Taking the contextual view, the best work of this century — better, obviously, than my own — does not easily ‘date’, in my opinion; that it is alive here and now is a prime fact of experiencing it, as much as an implicit commentary upon the attitudes that underpinned its production. To see this it is necessary not only to rub our eyes and look afresh, but also to fight off the fashion-mongering of critical opinion and the massive perpetual invitation to buy-sell-update-and-throwaway that belongs with it. Readers may see these things as the health-index of a vital economy, or as a load of trivial rubbish seeking to legitimise its unnecessary existence. Personally — and this is a personal book — I have no interest at all in instant culture and all my work opposes it. I think — anyway — that books and buildings and other artefacts need time to settle, even if this is a view that no weekly journalist can afford to entertain. In my own case I find it interesting to see what holds up and what falls away; taken by history. There is a more general interest, to do with the working attitudes within the modern movement to which I belong, and also my own view of what constitutes, viably and usefully, a ‘present’; but these matters will naturally arise.

It may be as well to add that my own design position is far from orthodox, deriving from an absolute commitment to getting it right rather than written (whether in wood, words, metal, glass, or any other material). This is a handicap to any designer, and a sure way of practising obedience, poverty and chastity — without choosing to.
A few of my poems have taken twenty years, others twenty minutes, but for good or ill they have had to find their form. Such a commitment is ultimately defensible; if not greatly in demand. Obviously I am sympathetic to the more usual view of a design responsibility – though I like to see it adopted out of belief or genuine affinity, not just as a personal convenience.

So; for *Models and Constructs* the grounds of admission have been three. First, that I would not wish to alter an exhibit in its essentials, if I were to do the job again tomorrow. Second, that the work should bear upon the themes of the book, which belong to its life. Third, that there did seem to be aspects (technical or aesthetic) of continuing interest to other makers and designers.

The last obviously embraces my strongest hope for the book. I have been impressed by the lively interest of workshop-type books of all kinds, but especially by those which could turn with the natural ease of a workshop conversation from nuts and bolts to wider issues of the day. George Sturt’s *The wheelwright’s shop* might have been prototypical; somewhat different but possible examples have come more recently from Alan Peters and James Krenov. Stylistically – and deeper than that – such writing can usefully distinguish the value of testimony, firsthand stuff, from that of polemic, which may keep us alert but ‘evidentially’ is quite something else; and at the social level it is good to see manual cultures given a verbal and pictorial airing from within their own territory. I cannot claim that *Models and Constructs* is speaking forth unambiguously on any such wavelength (or has the natural authority of singlemindedness), but I hope that workshop people, and makers generally, will find plenty to put their minds to.

The wider distinction here – and it is the last I shall make in this introduction – is between the role and nature of the field-worker, who provides a certain body of evidence from the field, and that of the theorist, critic, and intellectual who orders and evaluates such incoming material against wider terms of reference than are naturally available in the field. There are, of course, differences of capability here as much as those of kind, in either contribution. It is interesting to think through the distinction historically (Kropotkin and Marx?) and it by no means follows that the differences of temperament and psychology – and style – are easily to be reconciled and dovetailed
In declining the Chair of Poetry at Oxford, 1877.

together. The theory in this book is almost too fragmented and unsystematic to claim the description; it is there out of a certain exuberance of response, and to help the field work along. In a limiting case of the same thing, William Morris seems to have appreciated the difficulty, when he was brought to remark (mildly, but surely with justice): 'It seems to me that the practice of any art rather narrows the artist in regard to the theory of it . . .'.

However that might be, the special pleasure and interest has been in making this book work as a construct – the task, shared with my publisher, of bringing subject and object harmoniously together. If there is a modelling privilege anywhere latent in this situation, as a stimulus to fresh approaches, I shall be as grateful as any reader. In writing such a book, there is always this sense of clearing the decks: that only now, the real story may begin.
A kitchen in London

Context

Confronting the more ambitious structure for the Penton kitchen, ‘simple’ is not perhaps the first word that comes to mind; though I believe there is a necessary and rational clarity in the way the elements come together, without which the approach would seem arbitrary and over-structured. The work was commissioned by an architect (Richard Penton) mainly for the use of his mother and her housekeeper/companion, who greatly enjoyed cooking and wanted a kitchen environment of some distinctive identity. The requirements and various alternative ways of meeting them were analysed in considerable detail in a job report extending to other matters of use and layout in the house; the report was in fact (as of course all reports should be) a fully consultative instrument. This kitchen occupied the centre of a former ground-floor drawing room, which was opened out into a room adjoining to form one continuous space between north and south windows. The kitchen, with dining space adjoining, touching and noting all its perimeters – was by its physical nature distinguished from loose furniture elsewhere in the large room, a consideration that appealed to its users (which was just as well). The job was workshop-built but for London, which required some unit-prefabrication and other standardised details, in order to keep within a fairly tight budget. This degree of generality, meeting requirements highly idiosyncratic in all other respects, gave the job its special character – half-way between joinery and simplified cabinetmaking.

Description

As far as possible the whole kitchen was considered in the round, i.e. as seen and used in movement: there are no ‘backs’ in the accepted sense, except where a (required) partial screen faces the related south end of the room. There is next-to-no gadgetry: this is the opposite extreme to the highly generalised and frictionless modern kitchen in which time and labour saving comes first. The Penton kitchen is efficient to the extent that it gives pleasure, and a positive sense of
The drawings show (left) a plan diagram of the kitchen layout, and (below) the context of its decisions on the ground floor of the house, with living room and south-facing conservatory adjoining. The two small rooms off the hallway were developed as a utility room and a pantry/dry-food store respectively. The dining table is shown schematically, this being supplied by the owner as the only loose furniture (apart from chairs) in the kitchen/dining area. A refectory type has been indicated, but was by no means essential.

location to its concerns – of being in and with them. A definite circulation pattern is imposed by the usual sequences of preparation, cooking, clearing, followed through obviously enough by the placing of parts, but the structure interpenetrates quite freely with the rest of the room-space. Since one complex is therefore entered within another, the kitchen parts are closely grouped, almost within reaching distance from a central working position, to offset a possible ambiguity in relationship. Help with various operations, such as washing-up or clearing from the dining table, or table setting, therefore takes place across the relevant work-surfaces rather than side-on to them. There is distinctively an ‘inside’ and an ‘outside’ to this kitchen (therefore) – given added definition by the shallow platform or podium from which the structure rises, but between the in and the out there is active functional (and random) discourse.

The job was done mostly with mahogany and parana pine, plywood where used being faced with white, blue or black formica. The sink working surface, mahogany, is used for food preparation and has (apart from the fixed chopping board) a catalyst-acting bar finish, heat and moisture resistant (‘Phenopol’). A standard small refrigerator is located at optimum height for sight and reach; the cooker is isolated and vented through a former chimney breast. Waste is taken from the end of the sink surface into a vented cupboard-basin immediately beneath.

Detail

It is interesting that this kitchen is difficult to discuss in terms of ‘description’ and ‘detail’ because in fact it was all detail, and the classical task of subordinating components to elements (a preoccupation of mine) without losing their ready and natural availability, was here a special interest in the job. For instance, the client wanted certain items – mainly glassware – displayed and lit and on view from the dining area. This occurs in the two-sided upper storage cupboard – distinguished by screening in clear plate glass (wired glass below) – which is fluorescent lit from below, but the horizontal trough had also to accommodate a sliding cutlery tray at one level, and a bread-board at another.
There are two support systems, the primary one in softwood grooved for lighting cable, the secondary being a run of mahogany horizontals which locate, and hold, containing storage boxes in the required places, but also locate switches and socket outlets (the switches therefore appear in the nearest thing to an apron frame beneath work surfaces). The doors to all cupboards (other than the standard fridge) are treated as separate applied flat screens projecting forward and above the bottom edge of these mahogany horizontals, the extent of projection forming the handle (some doors therefore open downwards). A cupboard opening only one way – towards the dining table – does duty for what is usually called a ‘sideboard’; that is to say, it houses items such as table napkins and cereals which simply go backwards and forwards to the table without any more interior kitchen circulation. Otherwise there is a through-circulation of items to and from the table – clearing to the outside of the sink surface, washing, drying, storage into the two-sided glass fronted cupboard, table-laying from the other side of it. The relatively small surface under the fridge to one side of it is free of this circulation. The small cupboard above – hesitating in its orientation – is for items (preserves, etc) used partly within the kitchen and partly on the table. (From the angle of inclination, the kitchen interior is seen to win, but some items (condiments, etc) might be duplicated in the two cupboards, whereas marmalade, as an instance, might store in the table cupboard. The logic of this would depend partly on familiarity of use.)

The triangulated unit above the sink, supporting a bleakly exposed but on the whole direct and acceptable water heater, has provision for a loudspeaker extension from hi-fi at the south end of the room, not fitted in the photograph. The sink unit derives direct daylight from the north-facing windows. The cooker was the plainest and simplest then available with the door opening the right way round, but even then all the controls were reorganised onto a panel at its rear. There is cookbook stowage just round the corner as part of the screen, with provision for bills, and nearby there is hanging space for kitchen aprons and the like.

Shown left is the kitchen landscape as seen from the dining table: visible here are the sliding cutlery box, the white painted end-grain of a fixed chopping board, the colour-coded switch plates on the frame below the sink surface, and the clearance gap to wastebin below.
Comment

The way this job is handled owed much to a general standpoint on conversions, namely, to enter history into them, and to expose the meeting of old and new expressively — the usual alternative being to modify or screen an existing situation (as with a false ceiling) and use it merely as a weight-carrying discarded shell. I repeat here what must be said of several jobs — and they did have to me an added investigative interest in spatial terms — because I think the approach did add not only a situational clarity to what was going on, but also a valid sense of continuity; the taking of food being a prime agent of precisely that. There is nothing really instant about food; although meals are pretty basic, there is process, ritual, and continuity involved, and I think this kitchen had the feel of that.

In a later job with the same distance problem from the workshop — a small bookshop also described here — I took a quite different approach to the way the job was built, but then bookshelves are not fully screened containers. Here the distinction was stressed, though partly, I think, as a manufacturing and assembly convenience. As to the construction of these containers, if the workshop had owned a heavy spindle, I would have preferred a comb/finger corner jointing system for its through-and-through character — dovetails would have been quite wrong. The joint used was natural to the Dominion, gave under test an adequately spread glue area, and allowed through-machining of grooves (i.e. without stopping) top and bottom — for, in this case, the sliding glass. Normally such a joint is protected from racking stress by a glued and planted back panel — which I now find worrying looking at the two-sided cupboards which of course lack that benefit, though in fact the construction seems to have held up over many years without trouble.

It so happens that this kitchen was rated a success. When the owner eventually moved elsewhere, it seems she was so attached to the structure that joiners were employed to dismantle the whole thing and re-erect it on an entirely different site. The results of this I have never dared to explore. The design was, of course, distinctively a one-off — so much for ‘place and occasion in design’ (but at least a continuing one-off for its user). Since the considered alternative was apparently to present the kitchen to the V&A, I can hardly complain on either count.
Preferred measurements

It is interesting that most workshops of all kinds seem to have them. In our design course at Bristol we always involved first year students with a month's work on the history and practice of measurement – the deeper sense of 'measure' requires it as a preliminary. Notation, as one aspect of practice, is of course necessarily a related study (e.g. as for pitch and interval in music). It doesn't do to accept A sizes, or the metric system, or imperial for that matter, as God-given and beyond question. We would go on from that to ratio and proportion, and only then to the notional and practical value of standards and standardisation. There, following the etymological approach if one should call it anything quite so dry, standards stand over against the idea and the ideal of 'standard'; rather as measurement does to measure.

Preferred measurements in workshops are closer to 'norms' and usually more matter-of-fact in their origin. They are those that seem to work as agreeable co-ordinates of the quantities commonly encountered – which, in a joinery/furniture workshop, will obviously involve certain heights and widths found desirable, the available sizes in doors and mattresses, etc, and of course wastage factors in materials conversions. It is possible – though not quite so normal – to rationalise these homely favourites into a system or numerical sequence that seems attractively all-embracing, that adds qualities of relation and definiteness, that does not exclude certain proportional possibilities, and that may have less obvious things about it. There is more to number than quantities; or so human history has always affirmed. Any such attempt is likely to fall well short of the totalising claims by Le Corbusier for his Modular. This I never found to work 'for the job' – there is a tendency to be working for 'it', for which you need conviction – conversion, even – and I suppose I never had the time to explore the theoretical foundations (even if able to do them justice).

At the bench a simple geometry does seem more persuasive than a complicated arithmetic, but much as I am addicted to various
developments of the golden section and the like, their value and use is either 'ideal' – a matter of open choice – or strictly contingent, i.e. applicable in situations of 'other things being equal' which in our sort of work they rarely are. Moreover, the further or prior extension of any proportional system can become dangerously academic; a putting of last things first even when such last things are of very considerable account in their own right. If this is an old-fashioned existentialism rearing its cagey head it is also a necessary feature of design practice, which as a social art is always adaptive to the given and the as-found; whatever it then does with them. Such a view is well open to challenge. Among architects Jim Stirling always took the robust approach that there is a way of doing anything that you are determined to have. Architecture, however, treats of a different degree of generality and a different order of predetermination, than is notable elsewhere in design. This is a matter that steadily becomes more abstract the more you talk about it: the opposite of normal daily requirements in a workshop situation. Preferred workshop measurements will always be preference exercised 'other things being duly considered'. There are also very practical reasons of a different order (to do with creative behaviour) for taking nothing for granted. However many tables may have been designed, perhaps hundreds, the height of a table (let alone other things about it) must be freshly considered and experimented with, as though a table had never existed before. This I have always taught and practised, and it does not mean reinventing the wheel; though even here . . .

With all such reservations, there is still a charm attached to numerical sequences; as when fidelity is more than dutiful. An order is bestowed that draws strength from being questionable.

Everyone knows that the metric system is an irrational absurdity, except for cash tills; if in doubt, ask anyone in the timber trade. Well of course we were still dealing in old money and the mysteries of fathoms, feet and inches, but the 'preferred measurements' I then used (and still do), having a simple numerical additive basis that a child of seven could manipulate, perhaps had something to do with that mountain of offcuts. Le Corbusier's Modulor, the Fibonacci Series, Matila Ghyka, and all that, were, of course, valuable standbys – and pointers to the nature of the problem; but I fear that although there were correspondences, my system had a different order in its
foundation. That there was and is an order, giving rise to a defensible if somewhat elaborate rationale in its support, I must ask readers to accept, but to work out for themselves if they have the interest.

The workshop was never consistent in following the 'preferences' (it all sounds rather Quaker-like) but it is useful to have norms either to work to, or to deviate from. It will be seen that the generators are the sacred numbers 3, 7, 9, and 12; the series being developed additively (that is to say, for instance, 61 being 7). The series gives 16 (inches) and 18 as alternative sitting heights, 21, 25, and 27 inches for tables. (half an inch less than the Modulor in the latter case), and 30, 34, 36 inches as alternatives for working surfaces. Below 1 the fractions were expressed as sixteenths, in the sequence 1, 2, 3, (4), 7, 9, 12 – seven-eights of an inch being our most obvious inconsistency, this being both a joinery standard thickness and correspondingly the set width of one of our dado heads on the machine. The main series ran as follows, with 49 as a special:

1, 2, 3, (4), 7, 9, 12, 16, 18, 21, 25, 27, 30, 34, 36, 39, 43, 45, 48, 49, 52, 54, 57, 61, 63, 70, 72, 75, 81, 84, 88, 90, 93, 97, 99

It is a well-known party trick, of course, to 'derive' the special status of 27 from play with 142857. Our own interests here were undeveloped and more practically based, but we did find that 27 kept coming up in a rather pleasing way, rather as the golden section is found to have logical persuasion as much as visual authority. With all systems or formulae I find the participants cheat like mad, often adding or deducting a common factor (or wastage factor) as we did.
When, how, and where

Under pressure from my publisher (who is, among other things, a design historian), I am adding here a note of some approximate dates for the work shown. I do so with reluctance – it spoils the fun, and rather detracts from a polemical intention in the book, which was to fight off the up-to-the-minute concerns of those resident demons in design, Moneyman and his girlfriend Instant Trend. Nor do I think that the linear approach is how life works, or usefully insightful. However, bowing to the inevitable:

I was with the Corsham workshop for most of the 1950s; a mid-term product being the general purpose low table which was accepted for the international industrial design pavilion at the Milan Triennale, 1954. At least I remember that. I had a fine diploma, but it vanished. Some of the work here illustrated was done before the Corsham workshop period (e.g. the ‘transition’ work discussed on pp. 127–9 and the desk, pp. 46–7); some at the start of it (e.g. the cottage kitchen, pp. 139–41, and the bedroom, pp. 161–6), and some immediately after, i.e. 1960–3 (e.g. the Penton kitchen, pp. 143–51, and Gowens, pp. 181–97), when I continued to work with the workshop but was teaching in London at the RCA. The Bristol work-desk was probably done in 1977; latecomer in a long line. The first version of Inquest of Icarus was written, and performed, in 1975, with some new poem components (e.g. ‘3rd time in’ and ‘God’s plan’) added as late as 1989. Other than the student lobby, pp. 169–71, the ordinary ‘design office’ work was irrelevant to the purposes of this book; and as mentioned in the workshop history, the bulk of our activities, whether ‘designed’ or not, would not have been recorded.

Constructions have continued up to the present time with poems, wall and strip furniture particularly, and spatial design (often unrealised); though I have never acquired the photographic habit and find it a little distasteful. Intermittently, much of my full-time energy has gone into the political, social, and programmatic aspects of design education, including the Bristol experiment.
The design and making of the book

The organising principles should be self-evident and self-explanatory. The main story-line continues through on the right, with illustrations and supplementary material going to the left. The poems, as the only artefacts in words, had to be distinguished by some kind of signal or barrier, or by a change of colour in their printing or of the paper. The latter might have involved a misleading relation to *What is a designer*, where this is used to distinguish the reference section. A change of typeface was already available from the decision to make this part of the book directly on a manual typewriter, which I undertook as for the original production of *Icarus*. The requirement here will be evident from the text.

Environmental imagery should be bled-off where possible, I believe, and certainly where the camera limits are arbitrary. Decisions in this area will be apparent from my first concept diagram, reproduced here, and the grid that (generally speaking) respects it. The allusion to line diagrams and half-tones will be obvious. The diagram was absurdly two-dimensional in failing to analyse the different paper requirements of printing processes, the cost constraints, and certain other difficulties. One paper that was all-accepting, whiter than white, and had the requisite depth and texture for – say – the extended reading passages of the workshop history, proved not to be available in the (quite normal) required size, and was thus an expensive option. A grey paper chosen for the poems had the same problems. These are stories typical of any designer’s life; whether maker, architect, or graphic designer. It had to be an expensive book, with good materials, the best printer, and meticulous layouts; or the opposite, a cheap paperback on recycled paper. In the end we opted for the conventional decision – a hardback to cover initial costs, and eventually a hoped-for paperback to join *What a designer* on the shelves with another couple of books I expect to do; all at accessible prices.

The detailed design of the series is a collaborative undertaking by Robin Kinross and myself. In a way familiar at least to modernist
designers (whose procedures have some undertow of rationality) we try to get the books to design themselves within their agreed principles and terms of reference. It works out that Kinross has the editorial and typographic function, I provide the content and my idea of the layout principles that would respect it, and between us we argue out the consequences. He has the last word on the text, I have the last word on visual decisions. It is a good collaboration and seems to work well: admittedly there is not a great deal of room for deviance, but much for discussion and interpretation. We hope the series will show our desire to break with English tradition and give some sense of object quality to books that affect to discuss it.

So much for shape and order. The form of a book must also subsume, and speak forth, its content, nature, and purpose, including at least a hazy estimate of its possible effects. There is an unseen half of this book, drawn mostly from my teaching work in architecture. This component split off at an early stage, and I hope to publish it separately under the title *Footprints and Handouts*. The split has partly resulted in a collection of instances more to do with ‘interior design’ (so far as their spatial bias is concerned) than with marketed products. It is true that any bridging endeavour between architecture (conventionally described) and design (equally so) will tend to occupy the middle territory. I also wished to illustrate work of a one-off character – objects in place – as a contextual base for discussion. Without considering just what my own work is about, there are other and interesting aspects to the distinctions implied, once they are thought through; but they are not examined in this book.