A DIARY OF THE WRITING, JUNE TO SEPTEMBER 1994

Summer vacation 1994(1): 23.6.94-31.7.94

The final examiner's meeting was over on Monday 21st June and we had our first tea ceremony, appropriately enough with Penny and Ron on the Tuesday. Thus tea, Morse, Japan and the cleanliness and simplicity of Japanese gardens and architecture all blended in a multi-dimensional way - not merely in reading and writing, but in space and time. This exemplifies a number of my earlier arguments about the connection between living and creating.

On Thursday 23rd June we went off to the Hebrides to see my mother. This trip was emotionally significant because we had once loved the island, then reached a crescendo of misery associated with my father's death and other tensions. So this was another exorcising of ghosts. Though wet, it was a lovely holiday. I had taken a pile of books, particularly Lafcadio Hearn, and entered a short of magical land half-way between the flower-strewn sand dunes and breaking ocean and the clean landscape so beautifully described by Hearn. His work gave me a new insight into the aesthetics of Japan, and especially Japanese styles of living, which supplemented Morse's work. On Saturday 25th I wrote, 'Went for a walk along Obisary - very beautiful and full of memories. But felt nothing more than a gentle glow of pleasure - and gentle relief that the long period of absence was over. Felt slightly exorcised and certainly pleased to be back. But the magic is largely gone - faded into the light of common day.' (An obvious allusion to Wordsworth!).

On Sunday 26th June I read Hearn's Japan: An Interpretation. I also jotted down the following list of 'Escapes' in my 'Illth Reading Book', an idea which would flourish later that year in Nepal.

**ILLTH AND WEALTH**

- The escape from:- >
- MISERY (war, famine, disease)
- CRUELTY
- IGNORANCE (technology of thought)
- LABOUR (technology of power)
- UGLINESS (aesthetics)
- INTOLERANCE (religion)
- INJUSTICE (law/politics)
- INEQUALITY (clan)
- POVERTY
- LONELINESS
- DICTATORSHIP/ABSOLUTISM
- DIRT AND DISEASE
I then drew up three plans for a work on the escape from misery, dirt and a more general work on the escape from 'illth'. I then rapidly wrote down a short account of what I thought the heart of the problem was.

This account, written on 26th June, is interesting for several reasons. It was a set of reflections away from the pressure of Cambridge (and especially exams) in the relaxed atmosphere of the croft. The chance to think more widely and to grapple afresh with the problem in this setting is, remarkably, exactly what happened again, as we shall see, almost a year to the day in the same place. It will be interesting to compare the two accounts and to see how the elapse of time and further work had altered the problem and the solutions.

What I wrote that Sunday morning, the mid-point of our trip to the Hebrides, was:

'Somewhere around the middle of the eighteenth century, a new form of civilization was born - a compound of capitalism, industrialism, urbanism etc. The world was transformed from this epi-centre in England, and the ripples spread out to engulf the world. About a century later, on another island, this time off the Chinese coast, a second period of growth occurred, in Japan, which has again reverberated around the world.

Many have been the attempts to understand the nature and origins of these great transformations - from Adam Smith through to the present time. It is doubtful whether any explanation will be found to convince all, since so much is arbitrary and based on chances.

Yet it might nevertheless be worth attempting to look at some of the pre-disposing conditions which made these events possible, the 'fertile ground' into which seeds could be blown (Gerry Martin), even if we cannot totally account either for the seeds, nor predict that they would necessarily flourish. We may also, inversely, examine some of the factors which inhibit or destroy their development and rooting elsewhere.

That England and Japan are suitable subjects for special attention if not difficult to explain. They are known to have been the epicentres of the first rapid industrial transformation in their respective areas - 'miracles' of a particular type. They also happen to be of a manageable size for analysis and usefully bounded by the sea etc. Each was a kind of natural experiment - a Galapagos island nurturing the growth of a rather peculiar civilization - very different from each other, but also very different from their neighbours.

Where then would we look for some of the necessary constituents for rapid economic and social development. In other words, designing a kind of 'New Atlantis' as Bacon, how would we describe some of the likely mess of intent? What was needed to provide the 'fertile ground' for development? In sketching this in briefly, it should be realized that each rough portrait will need to be expanded and perhaps modified - but we need a rough map of the wood before we dive in to look at a certain tree. When we emerge, however, after a minute analysis, it is likely that the
wood will look very different from that which we now sketch in... But what a map, even a fabulous one - to change the metaphor, we can't even leave past. Hence a preliminary set of guesses of what is important?

This can be based on the world as revealed by *Cambridge History of Japan*. This shows some interesting solutions/dissolutions. Let us look at this.

*England in the Japanese Mirror*.

We have thus seen that the solution lies not in things, but in the relations/weightings/things/absences and presences. Hence fertile ground is a package - many different chemicals in the soil before planting - water/wind/temperature/labour etc. Following the metaphor, each of these constituents needs to be examined in more detail. We could start anywhere, but let us start with demography.

Here as elsewhere, it is necessary in order to bring out the special features/solutions of England and Japan to look at what one might call the natural tendency - the normal case - what usually happened - the backdrop or backdrop.

This backdrop, in this case, is usefully pondered by the greatest analyst of 'traditional' demography - namely Malthus...Thus one can outline his iron laws and the etc. His views later were corroborated by due studies...

This was extremely fertile ground - both the crisis mortality and the inevitable biological pressure which would eat up any gains in productivity. In the ?? Malthusian 'normal tendency' there was no chance for long-term growth and development. Mankind caught on a tread-mill.

How, then, was the Malthusian fertile ground turned into fertile ground? The first thing to eliminate was war - and this was done in England and Japan by C17. The next was famine - by same time. And the third epidemic disease. The time at which and ways in which these were taken under control will occupy the first half of the book.

By having eliminated periodic crises, one is faced with two further problems. Once is that population densities will increase and hence population density disease of endemic kind will emerge with dirt/disease etc. This will be something to concern us in a separate examination of a tree. But an even greater problem is the supposed power of biology - the natural passion between the sexes. How as this brought under control? This will occupy the second half of the book.

Having examined the installation of a non-Malthusian demographic regime by at least the C15/C16 in England and the C17 or earlier in Japan - one can see some of the consequences - in terms of security, build up of wealth, flexibility of labour forces etc.

This shows how one element in the fertile ground was there - or one plank in the boat to change
a metaphor. Other works will explore this. What this shows is how the end result was achieved - but with entirely different techniques in the two cases.

One might try to visualize 'fertile ground', using Kubla Khan, as follows: 'So twice five miles of fertile ground, with walls and flowers were girdled round: and here were gardens bright with sinuous trees, where blossomed many an incense-bearing tree; and here were forests ancient as the hills, enfolding sunny spots of greenery.'

+ river - tumultuous, destructive, creative (= river of ideas, competition etc.)
+ stately pleasure dome...Thus...

Also translatable as... suitable social structure/economic dispositions/political systems/legal systems/taxation/etc./religion/culture/demography/health and cleanliness/etc.

If one looks upon both England in the C18 and Japan in the C19 as places which were in preparation for the miracle - to which the final ingredient of outside ideas were added. Then one can look at these pre-conditions without having
  a) to argue there was only one path
  b) that there was any necessity to what happened.

Thus it just suggests some of the necessary but not sufficient causes. The rest if the result of time and 'chemistry'.

What are the necessities for fertile ground? Peace, easy taxes, due administration of justice, political decentralization, religious tolerance, piety, asceticism, cleanliness, precise workmanship, open social structure, controlled fertility, co-operation, absence of despotism - a mixture of presences (e.g. education, good communications, land work etc.) and of absences (war, famine, disease, despotism, predatory church, overwhelming kinship etc.)

Hence a careful blend of the right soil, the right climate, the right water, the right protection from wind, the right cultivation methods, the right drainage and water system, the absence of weeds and rocks, the absence of vermin and predators and insects and hail and robbers etc. In other words, certain absences and certain presences - both equally important. And all these, in different ways, Japan and England both had...

The first chapter could briefly point at

a) What the problem is - namely the Smithian problem of 'an inquiry into the original causes of the wealth of nations' - wealth widely interpreted. This can lead in many directions - one of which is

b) Two instances of 'miraculous' breaking into wealth - namely C18 England and C19 Japan. An examination of these two cases against a backdrop of the 'normal' state of things might illustrate
the problem.

But where should one look - clearly a whole host of necessary causes/origins - many more than Smith’s peace, easy taxes etc. Thus where else? A brief summary of where we will look - social structure, easy etc. This is the rough shape of the map.

Then set sail and look at a particular part of the map in detail - starting with demography.’

After a further plan, I wrote a few more pages, on the economic development of England and Japan. But this is really no advance on many things I had written before. I seemed to have reached the end of a thought process. The rest of the holiday was spent reading, talking and relaxing.

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We returned from the Hebrides on 30th June and on Friday 1st July, having been anchored in harbour, so to speak, for the period between 14th April and then, reading and following clues, I took stock again. The chart I drew for myself, as well as my realization that I would have to change my working methods (the first hint of the new method of scissors and paste, and re-typing by Penny) is laid out in my Thoughts book on 1st July, which also contains a number of ideas about splitting or joining the book.

‘1.7.94 Thoughts on starting to write...

Have just returned from a refreshing holiday in the Hebrides, when I read a good deal of Lafcadio Hearn and thought about what I would try to write this summer. Now sitting for the first time in the ‘Morse House’ in delicious peace, with the little bell tinkling and roses everywhere and the lovely prospect of some three months of writing time ahead before we go to Nepal. So what shall I write?

Of course, all this will change, but it does seem that one could envisage splitting the 90,000 words of demography into 3 separate works, under the general title of Illth and Wealth. These would be

**Illth and Wealth**

Control of crises  Control of disease  Control of birth
(war, famine, disease)  (dirt, morbidity etc)  (reproduction etc)

This trilogy would start the much larger set of volumes under the general heading of ‘Illth and Wealth’ - which would include social structure, politics and, in general, try to show what necessary, if not sufficient, conditions were needed for the successful emergence of capitalism. While writing I would also like to experiment with the best way to work - using information etc. In theory, this is an experiment in association and separation, in creativity and linking of things
previously held apart. A mixture of computer and hand-written and typed materials. What I have to integrate are: - previous writing (a.210,000), previously published materials (c.10,000 - e.g. work on E. Gellner?), new material to be incorporated from books (c.50,000) and new writing (c.100,000). This would make c.280,000 words. This could be a large book like K. Thomas Religion, or, preferably, a series of shorter books, as follows:

Control of -


BIRTH: Summary of approach - intro: the predictions (Malthusian): Biological factors: marriage: sex and birth control: housing: other causes: consequences of pattern. 80,000

Thus during these 3 months create an integrated first, full version - probably c.300,000 - which could be pruned to 250,000 later...

This roughly predicts the length the book was to reach by the middle of September when we left for Nepal, namely some 255,000 words. It also placed the work, now three rather than two volumes, alongside other volumes. But most interestingly, I think, it explains why I moved to a new writing method. I had a mixture of materials, and these needed to be integrated. It would be slow and very tedious to type it all out again and inhibit creativity. So instead I developed a method of which there is a sample page which linked various texts together. [perhaps insert facsimile of page XXX]

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The period between 1st July and 15th September, when I finished the next voyage, was the longest stretch in open sea - some two and a half months and constitutes the heart of the work in many ways. I had now been intensely thinking about the problem for about 6 months. I had had two bursts of writing of a few weeks each in the Christmas and Easter vacations. In the terms I had amassed a great deal of further material, xeroxes,books etc. and parts of it were indexed. I roughly knew what the problems were, but I was still looking for solutions particularly the reasons for the unexpectedly low and falling mortality.

On 1st July I made a plan of what would constitute the setting up of the problem, headed 'The problem - the Great Transformation'. Chapter 1 would consist of some previous specifications of the problem and attempted solutions by Adam Smith, Weber, Gellner, Braudel and other writers. Chapter 2 would set out 'The Fertile ground - a comparative approach'. This would explain the ideas of fertile ground
The concept of a structural approach (the interconnection of things), the concept of a comparative approach (a backdrop), and show why England and Japan had been chosen. The third chapter would then start to give a preliminary sketch of England and Japan.

The next day, Saturday 2nd July, I noted in the diary, 'Started writing in earnest today. Having planned out book into three books yesterday, started today on revising chapter on War...am still reading Lafcadio Hearn.' We spent that night in the 'magical' Morse house and the following day 'did some useful writing on 'War' and then organized a treasure hunt...' That same day, 'Some reading and now back to finish King, Farmers of Forty Centuries - an excellent book, which gives further support for my 'tea' theory.' Incidentally this book, which had a considerable influence, is a very good example of the serendipity and good fortune arising from second-hand book hunting. It is not the sort of book one would stray across on library open shelves for it is neither new or old enough (1911) to be remarkable and I have never come across references to it elsewhere. Yet it is a really wonderful, professional account of Japanese and Chinese agriculture, picked up in the course of book hunting.

On Saturday 9th July I summarized the week's activity, when we arrived for a trip north to Dent.

'Saturday 9th July.
A week of immersing myself back into writing. Re-wrote a version of 'War' (c.10,000 words) and nearly completed another version of 'famine' - now split into two chapters. Made use of Morse house in which to sit.' The following day I worked further on 'Famine' and noted 'Am reading more Hearn'.

In the middle of that week, only a few after thinking the book could be split into three, I wrote in the 'Thoughts' book.

6.7.94 Further thoughts.
As I write, I find everything is interconnected. Hence, perhaps it would be better to put all this onto one volume, which would be as follows.

IIIth and Wealth: the demographic foundations.
A. Method and background.
B. Control of crises.
C. Control and dirt and disease.
D. Control of birth.
E. Consequences.
It might be rather large, but would at least allow cross references between the parts...

From the 7th to 11th July I worked on the two famine chapters, and on 11th July drove down from a brief trip to Dent and 'started thinking about epidemics' and to read more deeply on the topic of the causation of disease, a subject which I had only been able to investigate in a preliminary way until then. I set out to research more deeply and re-write the chapters on the various kinds of disease, working on
the causes in general and viral and vector-borne diseases on the 12th to 16th July.

On Saturday 16th July Cherry and Michael arrived and Sarah and I went to a 25th celebration of the Cambridge Group. Talked briefly to John Walter about famines. He showed an interest in what I'd written, and asked to see it. My diary notes that 'Had very interesting talk to Tony Wrigley, who suggested working on a project together.' Since his work has been one of the key stimulants to my whole enterprise and I greatly admire him, I was pleased, though didn't pursue this. He also mentioned that Roger Schofield had been working on the dramatic fall of mortality in the eighteenth century, and particularly among infants. That was the kind of chance remark that one picks up and enters into the creative work - as did Tony's remark that maybe coal, by warming houses or in other ways, may have affected health. I also noted, 'During the week have moved on with writing - a separate log of what I've done on sheets of paper. Have mainly been working on disease of various kinds, e.g. today typhus and malaria. Getting really interested in patterns of illness.'

On the Sunday I was tired and 'tried not to work too much' but 'Did a little writing - on dysentery etc...' I further commented, 'The writing seems to be going a bit slowly - but this is probably just an illusion - partly caused by feeling of being swamped by too much data - have I chewed off too much I wonder?' This is a revealing comment. Inside were swirling about not only three vast sets of wider data on England, Japan and Nepal, but I was now having to come to grip with a whole new discipline - medical history and epidemiology - about which I knew next to nothing. What was particularly problematic was that I was simultaneously having to absorb a great deal of technical stuff, and try to write about it in a clear way. Consequently I think bits of the writing at this time were probably rather confused and had to be sorted out later. Yet I had to know enough in order to follow various hunches. A good deal of semi-blind blundering about and many naive and elementary errors, some of which Gerry pointed out to me, or I found out later with further reading.

* *

Cherry and Michael left on 23rd July, after a pleasant period. I had done a little work with Michael installing a CD-ROM and back-up tape system and Sarah's large computer. On Saturday 23rd July I wrote, 'Also managed to do a reasonable amount of writing during the week, despite having to upstairs in barn - re-wrote much of the five new chapters (expanded from two) considering the various types of disease. So the book is going well - about 130,000 words of a sort written, though lots of holes etc. Also getting some reading done...' At that time, Michael was working on my desk downstairs, Cherry in the Morse house, hence my retreat upstairs where I remember making particular use of Merck's Manual of Diseases, which I had originally taken to Nepal, and which filled in the ghastly details of many loathsome and painful diseases.

By Wednesday 20th July, the end of Cherry and Michael's stay, therefore, I had filled out the details of the three major horsemans - War, Famine and particularly disease - viral, insect-borne, water-borne and contagious. After a day off I started on section 3, the crucial puzzle of the causes of the odd pattern of various disease, whose rise and fall still mystified most historians. Among the largest mysteries were why bubonic plague disappeared in Europe, why malaria disappeared, more or less, in Japan, and why
dysentery declined in eighteenth-century England and was not more of a problem in Japan. There were numerous other puzzles also, but they could all be summed up in the observation that against all expectations and all odds, mortality declined rather than rose in early modern England and Japan just at the period when their populations were growing in size.

On Friday 22nd July I sat down to plan my strategy for approaching this mystery. This would be the section which could prove to be the most exciting and unexpected of the whole book - namely an attempt to probe deeper into the causes of the unusually low perennial mortality in England and Japan. As I noted in my 'log', at the start of the process I had five chapters on 'causes', 'dung', 'diet', 'body' and 'housing'. I decided to re-plan these sections and to expand and divide them somewhat, as follows (according to a plan of 22nd).

**PART 3**

*Causes - some background causes (medicine, climate etc)*

**Inside the body**

*Food Drink*

**Surface of the body**

*Hygiene*

*Dung*

*Clothing*

**Body and wider environment**

*Housing*

*Work*

**Comparisons of England and Japan**

*Animals*

*Purity*

*Poverty (relative wealth and technology)*

*War*

I started by planning out and starting to re-write the section on drink. Again I took something which existed in **embryo** and put it into an expanded frame. The section I already had was as follows:

**Dangers of drink - which diseases it causes.**

1. **Water supplies - England, London**
2. **Water supplies - Japanese?**
3. **What did people drink?**
   - England - beer etc.
   - Japan - not cold water, tea drinking, absence of milk.
   - Infant feeding.
My revised plan for the section was:-

a) Dangers of drink - milk, water, which diseases and how much.
b) Avoiding the dangers
   (i) protecting and improving the water supply
       England - pipes, wells and sources, water disposal
       - sewage,
   (ii) avoiding poisonous drinks - milk (animal), water,
       in infancy and adulthood. What drunk and how much.

The first section on the diseases caused by water was elaborated a little on this. I realized that we were searching for a powerful 'x' factor which would help to explain the curious drop in mortality, and particularly dysentery, in the early modern period. We knew that this was not to be found in general nutrition (food). McKeown and others had been certain that the explanation could not lie in improvements in drinking water, which only occurred in the later nineteenth century. There were definite improvements in the quantities of water available in England and Japan in the seventeenth and eighteenth centuries, yet the quality was still pretty bad. 'But did they drink water?' in England and Japan. The importance of tea.

On 23rd I started to write about drink in general (water supplies, beer, milk) On the 24th July I wrote three thousand words on drink and in the afternoon Marilyn Strathern came out for supper and I noted, 'We went for a walk and talked in the Morse house. She has done excellently as Head of Department and it has been a great relief having her there.' I also noted 'Sarah reading parts of draft of my book' - she noted the next day she was reading 'Alan's chapters on disease and famine.' She sensibly continues, 'One realizes what a large subject he's attempting when it becomes clear that there are so many avenues to explore - the whole world through the whole of time, it would seem if one tries to look at all that's relevant.'

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The following day, 25th July, I made a start on a revised section on tea, which soon began to look as if it might warrant a separate chapter as 'Drink 2'. This is shown in the plan which I wrote on that day in my Thoughts book, to remind myself of where my over-all argument was going.

25.7.94 Plans.

Have been writing steadily (see writing log), so now feel that a new possible orientation may be possible.

Previous approaches.
4. The demographic dimension - general pattern and consequences.
5. How fertility was restrained -
   a. Biology
   b. Marriage
   c. Infanticide etc.
6. Why fertility was restrained -
   a. Family and adoption
   b. Economy etc.
   c. Other pressures - religion etc.
7. Low mortality pattern - crises and perennial.
   a. War
   b. Virus
   c. Vector-borne
   d. Insects
   e. Other
9. Why mortality was kept down -
   a. Outer environment - streets/towns
   b. Houses
   c. Clothes
   d. Washing
   e. Toilets
   f. Food, 1, 2
   g. Famine
   h. Drink, 1, 2
10. The background to low mortality -
    a. Animals
    b. Purity and cleanliness
11. Conclusion

It will be seen that fertility has now shifted before mortality. And under '9', there are, in effect, some
ten chapters, including new headings such as 'washing' and divided chapters on food and drink. There
are other innovations, for instance projected chapters on animals and on 'purity and cleanliness'.

On 26th Gerry Martin was coming for a three-day discussion of the general problems of 'fertile
ground' so I tried to summarize the general argument of my book in a flow diagram.

Setting up the problem and approach.
The problem and previous attempts to solve it (capitalism, modernity, wealth, industrialism etc.)
> Methods of attacking the problem (comparative and structural approach) > The three major
cases (England, Japan, Nepal) > The demographic/medical dimension (population and economy - the peculiar cases of Japan and W. Europe). Why? >

**Restrainted, non-Malthusian fertility.**
How - biology, marriage, contraception, abortion.
Why - heirs, inheritance, adoption, economy and society etc. >
also

**Low mortality pattern.**
How - war, famine, virus, vector, water, other diseases.
Why - outer (streets, towns), shell (houses, clothes), body (washing, toilets, food, drink) >

*Why. Culture - purity/religion etc.
Economy - animals etc.*

**Conclusions.**

I obviously discussed this scheme with Gerry, for there are notes on the back suggesting that we particularly discussed the contribution of new knowledge, embedded in new artefacts, as a central feature of modernity.

Perhaps particularly worth stressing it the considerable emphasis I gave to setting up the problem in a very wide way, to show that this work was just a part of an assault on much wider issues. My major interest remained the puzzle of the origins of 'capitalism, modernity, wealth, industrialism' etc. but it was clear that the escape from the 'Malthusian' world of high mortality and fertility was somehow essential to understanding this. One way in which this escape might help to explain the hitherto mysterious boot-strapping escape of England, and later other parts of the world, was set out in a model contrasting the 'High Pressure' and 'Low Pressure' regimes, which I drew at about that time, and which is as follows.

N.B. THIS TABLE NEEDS RE-DOING XXX

<table>
<thead>
<tr>
<th>High Pressure</th>
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<tbody>
<tr>
<td><strong>HIGH MORTALITY</strong></td>
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<tr>
<td>Vicious circle</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL DECLINE</strong></td>
</tr>
<tr>
<td><strong>HIGH FERTILITY</strong></td>
</tr>
<tr>
<td>(starting point)</td>
</tr>
</tbody>
</table>
ECONOMIC DECLINE/
STAGNATION

(Laws of arithmetic
exponential
growth)

MY MODEL

Starting point Low Pressure

LOW MORTALITY

Virtuous Circle

ENVIRONMENTAL
IMPROVT.

LOW FERTILITY

ECONOMIC GROWTH

*

As usual, therefore, Gerry's visit and interest, desire to look at broad issues pulled me out from a too myopic obsession. Our attempts to map out the nature of 'fertile ground', though an apparent diversion, set my work in an even wider context, and fed into it in complicated, though indirect ways. Gerry and I visited the Epistemology Group run by the physicist John Ziman which has intermittently figures over the last 18th months in the background. Gerry and Hilda left on Friday 29th July and I finished my piece on tea and started on hygiene, continuing with it on the next day. On 30th I wrote in the Diary - 'am well on target having re-written/written about 5 chapters and covered about 6 chapters of original book - about one third, which is O.K. if I am to re-write before October.'

Sarah's mother was suddenly ill so the following day (31st) we drove up to Dent, and arrived at 5 p.m., where I sorted out further ships in relation to hygiene. I was right in the middle of a fascinating and complex chapter and in full flow on a section which was exploding in my mind with new possibilities, clues and ideas. I don't think I had taken up my computer, as we were only going to be away for a couple of days, and Sarah's mother had suddenly been ill and it was a rushed and unplanned visit. This emergency and the absence of my computer had an unexpected and very significant effect on my writing and forced me to adopt a new method. This makes a natural break.

On the evening of 31st July, after a long and tiring journey, and without my computer but itching to get on, I noted in my log:

'sorted ships and wrote a little - 3 pasted sheets c.1500 words' The following day the log reads: 'a-hygiene - pasted slips onto sheets - some 10 pages at 500 words per page - 5,000.' Against this I have later written in red ink, 'NEW METHOD!' The only puzzle is that it took me so long to do this. Despite this for a month or so I continued with the method of typing everything myself. As noted above, when I had come to the re-write of the material at the end of the summer term, I had realized that I needed a better method. I had even made a note in my 'IIIth' Reading book.

Method of writing.

Ingredient.
a) Previous writing - in computer - c.100,000
b) Quotes in database - in computer - c.50,000
c) New writing - to be written - c.60,000

Various approaches.
a) Do all on paper - sticking previous writing into large sheets and then attaching subsequent writing.
b) Do all on computer - re-typing in quotes - cutting/pasting quotes by some means.
c) Mix.

[ Re-do this figure: XXX]

Previous version Type in new Stick quote onto
on paper > bits of mine sheets with cross-ref numbers and later put together

Get Penny/Iris to put the bits together. The main thing is probably to do the least strenuous, least inhibiting, least fiddly method while writing. Then later re-type by myself or others. Can be done at leisure. Nothing to impede burst of creativity/connecting in 3 months.'

Of course, I enjoyed writing and with my word-processor and printer it was nice to have a version nicely printed out. Contributing factors in the change may have been the fact that my printer had broken down a few weeks before and was taking ages to repair, or the fact that I was panicking about getting finished, plus the fact that Penny was available to do typing. These were the reasons I moved to the 'writing combined with pasting' method. This had several effects. It was much less tiring than hammering it all out on the machine and hence I was more able to concentrate on the difficult bits, which was the sorting and ordering and finding of information. I also moved much faster, averaging 2-5,000 words a day from then on, instead of the 1,500-2,500 at the maximum of the previous six months. Since everything is interconnected and one has to have all the threads to pursue one, the faster one can work in the maximum creative period the better. So the method was excellent.
I described the change thus in my diary on Saturday 6th August.

'Writing now picking up again. Have devised a new method which is back to my old method, i.e. writing connecting passages and incorporating slips - rather like Keith Thomas; and how I wrote *Marriage*. Makes it both faster, much less tiring, more enjoyable and much easier to think properly and more about. With Penny/re-type, seems an ideal solution. Consequently have managed to write chapters on clothing, washing, toilets - all in one week.'

The actual productivity of that week was as follows. I started to plan out the chapter on clothing in Dent on Saturday 1st August, travelled down to Lode on the Monday and worked in the Department. By the end of the Tuesday a 6,000 word chapter was drafted. On the 4th to 6th I worked on splitting a long chapter on 'dung' into two chapters.

The development of the complex chain of causation associated with 'dung' can be used (and developed) as an example of the way in which the mind works. I had begun to get interested in the subject in a more than casual way through the work of Edward Morse, whom I later discovered has not only written some brilliant pieces on Japanese toilets and sewage systems in his two books, but also a celebrated article on 'Latrines of the East', comparing Chinese and Japanese toilets.

My ideas for revising the chapter on 'dung', which now became two chapters, are particularly full. For instance, part of the plan, showing how the connections were mounting, reads: 'Introduction - contradiction between efficiency and effluent, insert para on diseases caused by; basic premise - revolted by excreta; excreta not thought good - English use of; cities case; too much dung (India and England); rice cultivation, use every inch; problem of negative feed-back; growth of cities and dung, Japanese toilet (Kaempfer, Tanizaki); animals and their absence - Bird and others on absence of animals, why? ecological etc. absence of animals. Effects of -

1) absence of animal manure in Japanese cities
2) need for human manure, use of other manures, every piece used, rent paid in dung, mother-in-law advises concerning excrement, secret of sewage disposal (Morse), what happens to...how spread - liquid etc. pulp. Flies - absence of in Japan - scarcity of horses...' This contains numerous possible links in a chain, as yet only tentatively sketched out, but worth explaining and often apparently coming as a complete surprise or 'intuition' of an unexpected kind.

* * *

On Saturday 6th, the diary records that 'we had the Saito family (Osamu, Noboku, Yoko) out for lunch and they stayed on to about 7.30 - so I think they enjoyed themselves! The high sport was performing the tea ceremony together. Noboku very elegant and dignified in a kimono and the whole thing very soothing -f make the place even more special somehow. Some good talk about Japan and Osamu agreed to read MS of my book.' As Saito is the leading Japanese demographer of the younger generation, this is important.

On Sunday 7th I noted, 'I continued and finished the re-write of the chapter on toilets and sewage in England. The whole thing very fascinating and I've learnt a lot - even if there is still an
awful lot to learn...Tomorrow I start on re-write of piece on houses and streets.' I further noted, 'Writing continues well and much less exhausting in the present mode - working without the computer. Have done about 17 chapter drafts on 2nd re-write since start of July and have about 13 to go - so well on course.'

On Monday and Tuesday 8-9th I re-wrote the chapter on housing, some 10,000 words, on the Wednesday some 6,500 words on public space. On Thursday Sarah went up to Dent for a few days to help her mother and I was left with my mother - the three nights apart being the longest we had ever been apart. I noted on Thursday 11th August, 'My writing is going well and I have been (re)-writing a chapter every couple of days. Quite a strain, but enjoyable. Today nearly completed a chapter on Japanese food, for example. So I hope to have a 3rd draft done by the middle of Sept. at the latest - if no further interruptions.'

On that day, with writing going so well, fate struck. I tried to pull out a heavy drawer in my desk - it refused to come, there was a ripping sound and I had obviously badly strained my right index finger - or broken it. For the next 6 weeks I was working with my hand either in a bandage or in pain. It was not until it was attended to by a witch-doctor in thak that it started to improve, from November...

On Friday 12th August I wrote the second half of the chapter on Japanese food, 'My finger still painful.' On Saturday 13th August I wrote half a chapter on English food. My diary records that this was 'a start, though hardly a satisfactory account of a subject about which many books could (and have been) written.' I recorded my loneliness without Sarah and the fact that I was 'longing to see her tomorrow. Would be utterly lost without her and 'phone calls always unsatisfying and stilted.' She returned on Sunday 14th August safely, and I finished the draft of the chapter on food in England. I recorded my plan: 'So now on to a last couple of chapters - on work and purity - and then this longest, 12-chapter, section if over in this draft.' I was 'still reading Embassy to China/Japan (Elgin) and Alice Bacon'. The latter a delightful book about Japanese home life at the turn of the century.

On Monday 15th August I wrote 5,000 words on food and another 5,000 on the same subject the next day. On Wednesday 17th I finished off this chapter and started one on dirt and purity, finishing that with 5,000 words on the Thursday. Saw a kingfisher that day. On the Friday I wrote a short piece on the treatment of the head and on Saturday 20th August, 2,500 words on animals. The rest of that day I took as a rest, with Japanese visitors - Emiko Ochiae who had been a long-term visitor to the Cambridge Group and who was an expert on Japanese midwives and had been at the meeting in February alluded to above. The diary reads:

**Saturday 20th August**

'Had Emiko, Hitushi and Lilly Ochiae for lunch - from 12.30 to about 6 p.m. Had a good talk and she seemed, on the whole, interested in my chapters on fertility and made some useful comments. Showed them round garden, computers etc. They gave us some lovely prints. Sarah went off for long walk with husband and daughter while I worked through chapters. It has been a good writing week in which I've written another two and a half chapters - on work, dirt etc. Now the major section on causes of lower mortality has been finished - about 102,000 words in 12
chapters on clothing, housing etc. Enjoyed writing them, so hope there is something worthwhile in them.'

The following day 'Another day of enforced rest. Did a little work in the morning - just thinking where to proceed with book. Spent half the day taking out three chapters which I had added in the morning!' This is one of the curses of computers - it is too easy, once in machine-readable form, to amalgamate, expand, shrink. One feels one is making progress, but much of it is ill-thought out and pointless - just a way of convincing oneself that one is doing something. Much of the rest of the day was spent on entertaining a student (Col.Kirk) and his family.

This was another minor natural break between sections. On Monday 22nd Sarah noted, 'Alan had another free day and could concentrate on writing - he's reordering the mass rather than adding more!' That day I worked on a chapter on Malthusian crises and the following day re-ordered my long review of the Cambridge History of Japan as a possible introductory chapter giving the background of Japan. This was just tidying up. It was now clear that I would have to start the re-write of the section on fertility, which had been drafted out, but needed more work.

On Wednesday to Sunday I read and indexed various pieces that I had collected on fertility. On Saturday 27th August I wrote; in somewhat poetic mood., 'Have spent the last four days having a slight break from writing, by reading a huge pile of xeroxes - each contradicting the previous one. Now have about 200,000 words written and one major section to write - on fertility. Then a first draft will be done. Seem to be going quite well, though a very large topic. Re-write on few of the introductory chapters at the start of the week. Listened to a Prom this evening and fed fishes. The summer slips by and touches of autumn in the evening and in the yellowing leaves of trees.'

The following day I wrote after a long walk, 'Started to write - on the fertility section of the book. Currently four chapters, but can already see that it will need to expand. Will probably start with a section/chapter on breast-feeding. Read in the Morse house.' On the Monday to Wednesday morning I worked on infant feeding, a new subject on which I wrote 12,000 words. On the second half of Wednesday and the Thursday I wrote a short piece on fertility and then from later on Thursday through to the Sunday on birth control (abortion and infanticide), on which I wrote some 7,500 words.

On Saturday 3rd Sept. I commented on progress in the Diary: 'Finished another section of writing - on abortion. Have started working on fertility section now - the last part to do. Wrote a new and long chapter on breast-feeding, which I enjoyed doing. The method of working from computer to slips seems to be going very well.' It was 'a beautiful peaceful time with nuts and fruits ripening and even hope on the northern Ireland horizon.' I include this last extract to illustrate two points. The rhythm of the seasons in the garden are often alluded to and it is quite clear that the peace and nature of the writing is affected by the rhythms of the natural seasons, as much as by the rhythm of academic seasons. And the diary is frequently filled with laments for Hopkins' 'world sorrow', which partly balance the sense of total isolation and absorption which this account may give - Bosnia,
Rwanda, Northern Ireland and other tragedies figure throughout in bleak contrast to the happiness of composition.

On Sunday 4th September, *'I did a little work on my section on infanticide - will start tomorrow on that.'* I wrote a little the following morning and then we went up to Dent for a few days and the log says, *'5th - 8th Sept. in Dent - finishing off 'infanticide' and reading/planning.'* We returned on the 8th and spent the 9th sorting out things. My diary entry for Saturday 10th September describes diversions and the activities of the week.

**Saturday 10th September**

*'Went to Lilly’s bookshop nr.Aylesbury, when we bought a couple of boxes of good books. A pleasant drive, especially on the way back with slanting sun across the autumn fields and woods. Wrote a draft of a piece in Liberty’s fabrics for Sarah, which she has been asked to do for a collection by Himeko Nakanishi. In the morning put some further touches to the first chapter of the fertility section of my book. It must now be about 200,000 words, with some 30 chapters. Re-reading bits, there is some lively material there and has the feel of something exciting. Now relaxed and clearing up somewhat before the next surge - Nepal.'*

In a sense, a phrase of creativity was coming to an end and my mind was moving towards the next major event - a long trip to Nepal. My attention was also now turning somewhat to wider methodological problems which lay behind the nitty gritty of what I had been trying to do in the summer, and this is indicated by the mention of a line of thought (or Sherlock Holmes) which I have just picked up again some 9 months later. I wrote on 10th September, *'Am reading Sherlock Holmes complete - to see if I can pick up detective clues to help with unravelling the mystery of modernity...'*

The relaxation of the mind, turning to wider issues and mulling over what had been done, a sort of autumnal laying out of the fruits in the sun, which is, in a way, what this autobiography is also, is captured in the entry from my diary.

**Sunday 11th September.**

*‘A very pleasant/happy day - hard work, interspersed with poetry and Sarah very loving. Sarah worked on the Liberty piece and her experimenting with printing with Wordstar for windows. I did a little work on two chapters on marriage etc. - which I’ve decided to pend - and then write a version of the preface on Robert Koch etc. Then sent sometime picking plums and helping Sarah with Wordstar printing. Hazel nuts falling in multitudes and the Acer turning red slowly and very beautiful. My mind mainly pre-occupied with my book. Am wondering whether to turn the sections on fertility and that on mortality round. In a sense the fertility is consequence of mortality and hence should be in that order - to see if Wrigley says something about this and look at Malthus flow diagrams.’*

Thus I was stepping back, writing a methodological preface (which I later largely abandoned) and wondered about the whole order of the book.
On Monday 12th I re-wrote the preface on Koch and started to work on an article on the 'Comparative Method' which I would deliver in India the following March, but was needed in advance. I continued with this article on the Tuesday to Thursday and then on the Friday re-wrote the concluding chapter to the book - on the consequences of the population pattern. The book had now reached another pause, as I noted in the diary on Saturday 17th September: 'Spent the week tidying up - wrote a little more of the book - now more or less drafted (and printed) out at 254,000 words with a rough preface and conclusion. Also wrote a draft of paper for Bangalore. And did some reading etc.' I again noted that 'Am reading complete works of Sherlock Holmes - looking for methods for the preface. Am enjoying it...Am feeling hopeful about my writing and excited when I read (re-read) bits of it.'

On Sunday 18th September, which can be seen as a kind of water-shed, I noted in my diary that 'Amy, Penny's daughter, came and talked to her about writing a book.' This was in a sense an immediate reflection on what I had been doing. usefully, in preparation for her visit, I decided to write down my thoughts about what I had been doing that summer and, in particular, the process of writing a book. The summary I made is as follows (from my Thoughts book).

18.9.94 Thoughts towards the end of the summer:

A very pleasant summer reading and writing. In the period 24.7.94 conceited the 88,000 word draft of the book into a 254,000 words draft. And still quite a bit to do! Have learnt an enormous amount and though it is still very rough at the edges, feel excited that I have really located an interesting topic and approached it in a new way. During the summer for the first time have benefited from having all my data in the TOPICS database - some 55,000 or so 'cards', so it was possible to write very quickly and to chase obscure subjects. Having this available made it possible to pursue topics in a novel way. I am going to show Amy Lang how I wrote the book, so will write down the stages briefly here.

1) Finding the crime/ puzzle - a short brainstorming at Dent - c.40,000 words.
2) Reading and marking up books for Penny to put in database using plan: Finding some facts.
3) Searching database for material - use only connect.
4) Printing out and moving cards about and finding further data.
5) Write and paste - re-assembling.
6) Checking writing.
7) and so on....iteratively.

So that is what I thought I was doing, although the process has obviously been enormously simplified.

*
By the end of the summer, when I printed out the 254,000 words which I would take to Nepal, and send a copy to Gerry for his comments, I had the following structure of chapters at this point, which gives the first full structure.

There was first an introductory section consisting of a preface, chapters on the Malthusian trap, two escapes from the trap, the background on these two islands. The next section was on fertility, with five chapters on fertility in general, infant feeding, marriage, birth control and strategies of heirship. The third section outlined these crises from which the two countries had to escape: war, two chapters on famine, the puzzle of low mortality, viral, insect-borne, water-borne and other illness, and the failure to find the causes of the decline of these. There was then a long section which went through the possible causes one by one in no particular order. There were two chapters on food, drink, tea, two on disposal of excrement, hygiene, clothing, housing, public cleanliness, work patterns. Finally there was a chapter on dirt and a conclusion. This was what we took to Nepal to read over and think further about.

VERSION ON 10TH SEPTEMBER : JUST THE 14 PARTS ON DIRT ETC.