

The conditions of creativity in the lives of major thinkers; some case studies.

We have examined the four lives one by one [that is Montesquieu, Adam Smith, Tocqueville and Fukuzawa – and later to add in F.W.Maitland – see my books ‘Riddle of the Modern World’ and ‘Making of the Modern World’]. Now we can study them together to see what, if any, where the common features which made these people able to contribute to a change of paradigm in their lives and works.

Lives and Experiences

David Harvey has suggested that "The exploration of contradictions always lies at the heart of original thought."¹ If this is so, then one of the deepest contradictions in the lives of our thinkers lay in the contrast between the world in which they lived their childhood and their late adolescent and adult experiences. Montesquieu grew up in the stifling atmosphere of Louis XIV's France and then experienced the sensation in his mid-twenties of the excitement and openness of the early years of the new reign after 1715. Furthermore, near to Bordeaux he watched the growth of a commercial trading city with its links to America and England. Adam Smith was brought up in the semi-feudal and Calvinist world of southern Scotland. He witnessed the rapid growth of commercial and industrial capitalism in Glasgow and the final destruction of the older clan system after Culloden in 1745. Tocqueville lived in the after-shocks of the French Revolution, witnessed the defeat of Napoleon, and saw the further erosion of an **Ancien Regime** world by the post-revolutionary mixture of a new individualism and equality. Finally, Fukuzawa was brought up in the narrow world of an anti-individualist and hierarchical clan, then saw first the shock of the arrival of the Black Ships in 1854 and then the enormous social and political revolution of the Meiji restoration of 1868.

What all of them had witnessed within a period of thirty or so years in each case, between the ages of 15 and 45, was a revolutionary transformation of their world, occurring at every level - technological, economic, social, ideological and religious. The strands are impossible to separate, but looking back we can see that they were all astride a cataclysmic shift in civilization. They could only see small parts of the shift, nor could they foresee the outcome or even be consciously aware of many of the changes. But that the world was rapidly changing was not in doubt and that it was necessary to work out a new set of theories to help understand those changes was evident.

The shock of contrast was made much greater by another feature of their lives, namely their travels to explore the frontiers of the 'new'. Rather than retreating from the flood of new experience of a new civilization they actively sought it out. Montesquieu's travels to England gave him a glimpse of a new, hitherto unknown, form of civilization, so different from his more slowly evolving France. Smith suffered a series of shocks; the move from Kirkcaldy to Glasgow, the six years in affluent England, the return to a rapidly changing Scotland, the travels to cosmopolitan France, the contact through his London friends with the new world emerging in America. Tocqueville explored England as an alternative system to France but above all saw the future in America. Fukuzawa not only saw the shocks of contrast between

¹Harvey, Postmodernity, p.343

his narrow childhood in Nagatsu and the world of Nagasaki, Osaka and Tokyo, but explored and immersed himself in all that was new in America and Europe. It is impossible to over-estimate the influence of these varied experiences, adding spatial contradictions to temporal change.

These experiences were, of course, shared by others who were less creative. So we are led on to consider other aspects of their lives and experiences which may have exacerbated the influences.

One feature of all of them was a very strong and retentive memory. We have seen that contemporaries commented on Montesquieu's very good memory, Smith's prodigious memory, and Tocqueville's likewise. As can be seen from Fukuzawa's writings and especially his **Autobiography**, he likewise had a good memory. This is important not merely directly for the finished work - using the memory as a storage device, the deep well of creativity, but at a wider level in orientating these thinkers. Most people experience deep structural changes over their lifetime, many people travel and observe other cultures. But most people forget. What was surprising about our four was that they remembered and thought it important to remember. Thus their lives were a kind of archaeology of remembered strata of experiences. Their writing was partly an attempt to bring some order into the contradictions between these memories.

Another distinguishing feature of all of them was an enormous and open curiosity. We find throughout their lives all were excited and curious, about other lives, other cultures, other ideas. Thus they immersed themselves in data collection at all levels, through conversation, through travel and above all reading and re-arranging of the reading. Perhaps the most curiosity driven of all was Fukuzawa, who absorbed much of the technical, artistic and philosophical knowledge of a thousand years of European history within twenty years. Given the amount they were absorbing and the deep ability for sustained concentration which was another distinguishing characteristic of all of them, conspicuous absent-mindedness and abstraction. Nor is it surprising that they all shared the characteristic of a certain shyness or reserve, a certain social awkwardness and diffidence. One at times gets the impression that they knew so much and were thinking so much, that they found small-talk difficult. Either they said a little or a great deal. They found the company of all but their closest confidants, with whom they could open up their very full minds and hearts, caused tension, not to mention a wasting time.

There is, of course, a point at which such shyness and reserve can lead into such self-imposed seclusion that it can lead to intellectual sterility since the spontaneous inflow of ideas, data and emotional warmth is progressively cut off. Another feature of all four of our thinkers is that they were saved from this danger by periods of practical involvement with the so-called 'real world'. To start with, three of them were deeply versed in the law, and two practiced as judges for a period. They all showed some interest in the practical aspects of the way they earned a living. Montesquieu took an interest in the daily affairs on his Gascon estate, as did Tocqueville later in his life on his smaller estate in Normandy. Smith was an effective and involved University administrator. Fukuzawa was involved in numerous practical affairs, from wood-chopping up to starting schools and newspapers and printing.

Particularly important here was their relationship to political power. They were clearly all interested in politics and the useful wielding of power. Montesquieu sat on the fringes of French politics and engaged in it at the local level; Smith advised the most senior figures in the British government from time to time; Tocqueville was periodically at the centre of French politics; Fukuzawa was close to many of those forging a new society after the Meiji Restoration. They thus understood the world of power, as they understood that of the economy. Yet they avoided the other danger, which was to be sucked too much into the mainstream of political activity. None of them became full-time politicians, though Tocqueville would have liked to be at one stage in his life. They were always on the edge, both on the outside and inside. The fact that they were all financially independent of government, through inherited wealth, patronage or hard work, was also crucial here. Not only did it give them the time for reflection, but undoubtedly contributed to that dispassionate and Olympian tone and view which they all shared. They

were often partisan, but ultimately independent. Fukuzawa made a special point of stressing how important such independence was, and he was right.

All of the above helps to explain some of the conditions within which their genius could flourish. But there are two other ingredients to be added which can make all the difference. The first lies at the level of the wider society. This concerns their links to past and present ideas. All of these thinkers drew for their inspiration on a vast body of knowledge from around the world, much of it propagated with the help of the printing revolution. Montesquieu and Smith were among the most learned men since Aristotle, having absorbed much of the philosophy and literature of the Greeks, Romans, Islamic thinkers and all of the European tradition since then. They were multi-disciplinary, the friends of poets, artists and others. In other ways, Tocqueville and Fukuzawa, through a narrower set of readings, drew on all of the best ideas of rich tradition.

Yet these ideas did not come to them from books alone. One of the notable features of all these thinkers is that they were each a node on a network of world-wide communication mediated through a local network of friends. A strong feature of the Enlightenment was that it was based on a pan-European system, later stretching to Japan, throwing up groups of like-minded individuals. Even at that time, progress in knowledge was very much a joint affair. It is difficult to think that any of our thinkers would have proceeded far without the conversations and comments of their intellectual circle. This has been particularly analysed for Adam Smith, but it is equally true of the others. It is in discussions, as well as in the knowledge that one is writing for at least a small circle of those who will understand, that the best work will be done. Changing a paradigm, like climbing a high mountain, is both dangerous and lonely work. Without David Hume and others Smith could not have climbed nearly so high. The excitement of a major shift requires a volume of people seeking to establish new questions and answers.

Yet again we are left with the question of what extra was there about these four figures which tipped the balance not merely towards a small contribution, but to a fundamental shift of vision which has altered all our lives?

Here we return to the idea of Troeltsch that the balance of contradictions had to be right. That is to say, the thinker has to have his (or her) feet planted firmly on both sides of a divide, to be standing on a growing fault with loyalty to both of the increasingly opposed worlds. This may lead to mental difficulties, including psycho-somatic illness and possible mental breakdown, possibly as we saw in the case of Tocqueville, Smith (and later Weber). It may lead to restlessness, sadness, depression and periodic periods of loss of confidence, as we see particularly with Tocqueville. Yet it does seem to be the contradiction, whereby the thinker feels an almost equal allegiance to two incompatible systems that generates the heroic efforts, sometimes leading to a new and creative solution.

These are not those conflicts between an austere, self-disciplined, puritan-type ethic and the sensual, libidinous, bodily gratification, although this may be a part of it. That Montesquieu exhibits signs of a strain between sensuality and asceticism, that Smith was caught between his Calvinist upbringing and mother on the one hand, and the new affluent, liberal, humane and sometimes hedonistic streak from his classical education and experiences in Oxford, London and France, is all relevant, just as the battle Fukuzawa fought between his love of drink and desire for self-control is relevant. But none of this is the key. That key lies in the fact that in many ways all our thinkers were men of both the old and the new world and they could not give their undivided allegiance to either. Their work was really the result of an internal dialogue, putting the arguments for both worlds, and in the end recognizing that both had their merits.

The contradictions lay at many levels. In the case of Montesquieu, we have seen that he retained his Gascon, regional roots and even accent while also being absorbed into Parisian cosmopolitan and urban

culture. His aristocratic and business ethics clashed in the legacies of his parents. He was thus both a member of the older hierarchical, aristocratic world, yet his writings show a mixture of this with a great admiration for the republican or at least bourgeois and liberal system he saw in England. Adam Smith felt an attachment to his Scottish roots, especially when he was at Oxford, and the abiding presence of his mother was a constant reminder of the older morality. Yet much of his writing was concerned with elaborating a moral foundation for the new commercial world which he had experienced. The heart of his problem was how to join private vice and public benefit through the mechanism of the market. The clash of morality and economics was never reconciled, but a new arrangement was suggested via the device of the invisible hand.

Tocqueville is the most extreme and explicit example of the double allegiance. Much of his work arises, as he says, out of the attempt to reconcile his heart, with its 'aristocratic' sentiments, and his 'head' with its recognition of both the justice and inevitability of democracy. The clash of his 'instincts' and 'opinions', of the old France he loved and the new America he admired, gives the energy to much of his most creative work. Fukuzawa may have formally rejected his clan after 1870 and for a time espoused all things western, but his reversion to Japanese clothing and food, his growing criticism and bitterness at the imperial ambitions of the west, and realization of the superiority of his own culture in many respects, as well as the subtle ways in which he altered the individualistic and egalitarian philosophy of the west, shows that he always remained ambivalent. His aim, like that of all our thinkers, was somehow to incorporate the new without totally destroying the old. And like them, this was not just an abstract theoretical problem but affected the whole of life.

A particular form of this ambiguity or internal and finally unresolved contradiction which is central to understanding our four figures is their religious experience. The Enlightenment was in many ways a religious movement, but not in the normal sense. What it did was to accept that the old faith with its priests, rituals and constantly intervening God was no longer tenable. Yet it did not thereby relinquish the religious search, but replaced the older structure with a new human based religion, ultimately retaining a shadowy Deity or Providence, but turning attention away from Him. In doing so our thinkers were faced with their central challenge; if the old religion could no longer serve as an adequate guarantee or foundation or morality, of meaning, of order, what could it be replaced with? This challenge would be taken up most forcefully by those whose temperament was most 'religious', in the sense of searching for answers to the old 'why' questions, but who for various reasons had lost their formal faith. Such a description fits our four thinkers well.

Montesquieu formally remained a Catholic, but the influence of his Calvinist mother and his Calvinist friends in Bordeaux, as well as his wide reading in other non-Christian cultures in the past and other civilizations seems to have eroded his faith. His works had to be published abroad to avoid the Inquisition for they were clearly too relativistic, too filled with a spirit bordering on the agnostic or Deistic.

Adam Smith like his friend David Hume, seems to have lost any firm faith in the old Christian teaching. Hence he was constantly searching for a new foundation for social and moral relations. From his **Moral Sentiments** and lectures on philosophy through to the **Wealth**, God makes hardly any appearance. At best Smith can be described as a Deist, his God was more invisible than his invisible hand. The new world has to cope with his absence.

Tocqueville's poignant account of his loss of faith gives a powerful image of the disorientating effects of reading too much Enlightenment philosophy on a rational and sensitive young mind. Yet he never scorned religion and constantly extolled the necessity for a system which he yearned for but could not believe in. Like the older hierarchical social order, he felt that the world would be in danger without it, yet logically he knew it could no longer be accepted.

Fukuzawa was a less torn version of Tocqueville. He also lost his faith in the old gods, in his case

through testing his growing scepticism by experiments with ritual objects. Yet while he could not believe himself, he acknowledged that without religion a society would lack cohesion and individual lives their purpose and meaning. Thus like all the others he was in that most creative, if difficult, of positions, of being a person living in a still religious world where doubt was growing and yet the arguments for and against the Deity were just about balanced. Hope and experience were opposed and much effort was devoted to trying to fill the God-shaped hole in their hearts.

This tension is particularly important for the development of new paradigms for it leads to the **simultaneous** loss of confidence in the old paradigm's content, with a retention in the hope that paradigms exist. On the one hand there are deep uncertainties, the old framework to explain how things come to be and are linked together is gone. One must think everything out from the bottom up. The task is gigantic and can only start if all is in doubt. On the other hand it can only be pursued if there is faith, of an almost religious kind, that there is a pattern and order behind reality, that there is a framework of a new kind to be found. As Koestler writes, even those who were not explicitly religious, and here Fukuzawa is the nearest of our thinkers to this, 'based their labours on one act of faith: the belief that there is a harmony of the spheres - that the universe is not a tale told by an idiot, but governed by hidden laws waiting to be discovered.'² As Einstein put it, 'Only the man who devotes his life to such goals has a living conceptions of what inspired these men and gave them strength to remain steadfast in their aims in spite of countless failures. It is cosmic religiousness that bestows such strength. A contemporary has said, not unrightly, that the serious research scholar in our generally materialistic age is the only deeply religious human being.'³ Our thinkers were in a sense deeply religious. Out of their search they created a new world view which would reconcile the ways of God to man.

The account above explains some of the background to why our thinkers broke with previous paradigms, asked new questions and tried to work out new answers. What it does not do is to explain why they were more than averagely successful in finding and convincing others that they had found a new framework. Many of us are confused and our lives filled with contradictions. But few create a **Spirit of the Laws** or **Democracy in America**. In order to understand that better we need to consider our thinkers from another angle, that is to say the way in which they worked or set about answering the puzzles thrown up by their lives and experience.

Methods

If we look at the actual conditions within which our thinkers worked we notice a number of practices which undoubtedly heightened their creativity. Indeed they seem to have been self-consciously attempting to encourage the chance of major advances - feeding, agitating and drawing off the accumulating data in the subterranean chambers. Like many others they discovered that certain conditions seemed to help them to think. Knowlson has summarized many of the tactics employed. There was the general smells and surroundings. 'Gautier said:" it is only the smell of printer's ink that can make me move." Dr Johnson needed a purring cat, and orange peel and tea within reach. Jokai could not write unless he had violent ink: black and blue ink would make work impossible - it had to be either violet ink or a lead pencil. Thomas Hardy prior to beginning work, always removes his boots or slippers.⁴ Or again, 'Shelley found that munching bread was helpful in composing, just as Addison and Sheridan liked to have a bottle of wine handy, and Schiller a flask of Old Renish - also rotten applies in his desk.'⁵ Then there was the light and temperature. '...for whilst Rousseau liked to think out his pages bare-headed in the sun, Bossuet preferred to work in a cold room, his head wrapped in furs; and Zola

²Koestler, Creation, p.260

³Koestler, Creation, p.262

⁴Knowlson, Originality, p.107

⁵Knowlson, Originality, p.107

pulled down the blinds at midday because he found more stimulus in artificial light.⁶ Or the view from one's desk might be important. 'Similarly, Kant used a certain tower, visible from his study window, as a sort of mental focus for thinking out his categories; and when, in the course of time, some trees grew up and hid the tower, he wrote to the City Council asking them to cut down the trees so that he might once more see the tower, "and think".⁷ Even the arrangement of one's desk could be important. 'Ibsen used to keep a number of little images on his writing desk: they helped him in the work of composition, he said, but declined to say "how", adding: "That is my secret".⁸ With this in mind, let us consider some of the working methods of our four thinkers.

One feature that stands out is that the creativity took time, was cumulative, was spread out over many years. It is a characteristic, we are told, of creative thinkers that '...at the beginning of each period stands the publication of a short preliminary note which contained the basic discovery in a nutshell; then followed ten or fifteen years of elaboration, consolidation, clarification.' (Rutherford?)⁹ Montesquieu sketched out many of his ideas in the **Persian Letters**, but then thought more deeply about them and published them finally some twenty years later. Smith summarized many of his central ideas in his lectures and talks in the 1750s and then worked on them and finally published them over twenty years later. Tocqueville did the same - outlining his central themes on England and America in the 1820s and publishing them over the next thirty years, or producing a short overview of some of the central ideas of **Ancien Regime** in an essay published some twenty years earlier. (See XXX on Tocqueville as historian). Even Fukuzawa returned again and again to themes of his youthful voyagings. The big ideas seem to have been developed between 18 and 30, and then worked over continuously for some twenty or more years. The twenty-year gap between Darwin's discovery of the theory of evolution and its publication in **The Origin of Species** is thus characteristic. It fits well with the model of thought which suggests that the intuition comes first, then the detailed data is assembled in a new order to substantiate it.

Given this long maturing process, what did our thinkers do in those twenty or so years? One thing they obviously did was to concentrate on a specified set of problems very hard. This was not just a matter of compulsive hard work, though all of our thinkers did drive themselves on, turning ideas over and over. As the Maxwell observed, 'A great part of our fatigue often arises, not from those mental efforts by which we obtain the mastery of the subject, but from those which are spent in recalling our wandering thoughts.'¹⁰ These people had the ability to pay deep attention to a subject, exclude the irrelevant, and then, when the problem was solved, to move on. It is a quality described by Burckhardt thus. 'Further, he has the natural faculty of concentrating at will on one issue, and then passing on to concentrate on another. Hence things appear to him simple, while to us they seem highly complicated, perpetually throwing each other out of gear. Where we grow confused, he begins to see really clearly.'¹¹ This concentration also helped them to work at great speed. Fukuzawa is particularly notable in this respect, tossing off major works in a few weeks, but there were times when each of the others achieved great advances in a few weeks. The common sense notion that the harder the problem the longer it will take to solve is wrong. Often, especially when intuition is properly working, the light bridge of connection has to be crossed very fast, in a leap or bound, or it will never be crossed. As Van Gogh put it 'It is in life as in drawing, one must sometimes act quickly and with decision, attack a thing with

⁶Knowlson, Originality, p.107

⁷Knowlson, Originality, p.107

⁸Knowlson, Originality, p.107

⁹Koestler, Creation, p.225

¹⁰Koestler, Creation, p.645

¹¹Burckhardt, Reflections, p.190

energy, trace the outlines as quickly as lightning.¹²

One way of encouraging this daring and speed was to engage in forms of communication other than reading and writing. Koestler makes the general point that playfulness, playing light-heartedly with ideas, often allows one to make insupportable, as yet, connections, to see and try out new things. '...playful or "l'art pour l'art" technique provides an unexpected clue to problems in a quite different field...is one of the leitmotifs in the history of science.'¹³ Or, as Wright Mills puts one part of this 'An attitude of playfulness towards the phrases and words with which various issues are defined often loosens up the imagination.'¹⁴ Such playfulness is easier in speech than in writing. Hence the importance of conversation. As Mills continues, 'I do not know the full social conditions of the best intellectual workmanship, but certainly surrounding oneself by a circle of people who will listen and talk - and at times they have to be imaginary characters - is one of them.'¹⁵ It is thus not a coincidence that many of the best ideas of our thinkers were first worked out in personal conversations. Montesquieu explicitly describes how his participation in the wit and repartee of Paris salons encouraged him to connect and take flights of fancy, which he then worked on in his study. Smith developed many of his central ideas in the Edinburgh debating societies in his youth and out of conversations with Hume and others. Tocqueville constantly stretched out in new directions through his conversations with his close friends and particularly Beaumont. Fukuzawa, as a member of touring delegations and of various intellectual circles had many opportunities to discuss and try out ideas.

At a level between the spontaneity of pure speech, and the measured logic of the final formal presentation in the book, there were other media which lay between the spoken and the formal written word. Montesquieu wrote down his philosophy as a novel, **The Persian Letters**. Smith forced himself to explain things clearly and persuasively in long lecture courses. Tocqueville used his letters to his friends to try out ideas. Fukuzawa wrote many of his works in the form of short newspaper articles. All these media not only help new, half-formed ideas, to gain a life, but encourage an initial clarity. They are of no use if the recipient is not engaged, perhaps amused, and persuaded. If they are dull or incomprehensible the author will have to try something else. They are all excellent small trial runs for parts of the **magnum opus**.

This tension between the freedom, flexibility and sometimes the illogicality of the spoken word, powerful for the moment, but soon lost, and the constraint, rigidity, logicity of the written word, less powerful at first, but storing and travelling better, is particularly well illustrated in these cases. We see the creation of thoughts often in the spoken word and then a conscious effort to retain the freedom, involving nature and spontaneity of creative thought even though it is frozen into speech.

Montesquieu used secretaries and amanuenses, in other words he would talk out his ideas and they would be written down. This helps to explain the directness and simplicity of his writing. It is a conversation between the author and the scribe, with the reader taking the place of the note taker. As the spoken word was constantly revised Montesquieu made strenuous efforts to maintain the energy, lack of coherence, spontaneity of the original speech. He woos and amuses the reader, creating deliberate confusions, surprises, a rushing too and fro as in the effort of a raconteur in a club to keep his audience listening. He does this not only to keep attention, but to make his audience think, to travel with him, to make an effort and join with him in the exploration.

¹²Van Gogh, Letters, p.152

¹³Koestler, Creation, p.103

¹⁴Wright Mills, Sociological, p.233

¹⁵Wright Mills, Sociological, p.222

This technique is well described by Koestler in several passages. 'Economy in art consists in employing its message in the gaps between the words, as it were. Words, we saw, are mere stepping-stones for thoughts; the meaning must be interpolated; by making the gaps just wide enough, the artist compels his audience to exert its imagination, and to re-create to some extent, the experience behind the message.'¹⁶ Or again 'It is presupposed that in this undetermined manner there is the general effect; enough to remind the spectator of the original; the imagination supplies the rest, and perhaps more satisfactorily to himself, if not more exactly, than the artist, with all his care, could possibly have done.'¹⁷ The aim is not to confuse, but to draw the reader's mind within the frame of the writing. 'The intention is not to obscure the message, but to make it more luminous by compelling the recipient to work it out by himself - to re-create it.'¹⁸ To a certain extent this was a technique used by all of our writers. They had thought through the stages of their arguments, but they knew that their audience would not fully 'understand' at the deepest level unless they re-created within themselves, parts of that journey, creating meaning as well as being told 'facts'.

Like Montesquieu, Smith also worked out his ideas through the spoken mode - as lectures, or by using an amanuensis. We have seen him striding up and down his study dictating and pausing. This gives his writing its peculiarly direct and simple feel; he is again talking to one person, even if it is written down. He is desperate to communicate, hates hand-writing, so pours out and elaborates the teeming thoughts to a paid listener. Only later is it cleaned and made a little more orderly, though it retains many of the inconsistencies which slip past us in the speed of talking but become obvious when one can compare sentences on pages.

Tocqueville did not employ a scribe, but he aimed at the same simplicity. Much of his writing was obviously related to long conversations with friends, to his numerous letters, to his desire to become a parliamentary debater. The sparseness, the gaps which the reader has to fill out, the underlying and powerful metaphors, the clarity, are all techniques aimed at the same effect as Montesquieu and Smith - namely not merely to inform his reader, but to take him or her on one side and to talk so deeply to them, to allow them to add to the conversation, and thus to change the way in which they thought. It is a dialogue rather than a monologue that is aimed for, even if Tocqueville can only write one side of it.

Fukuzawa pursued the same goals. He devoted a great deal of time to the rhetorical, presentational, side of his work. Like all the others, he wrote as simply, directly and clearly as he could. Like the others he then tried out the writing on ordinary family, friends, non-intellectuals. If they could not understand or found it dull, he re-worked the material. Like them, and as was written of another great stylist F.W. Maitland, reading Fukuzawa is like going on a walk with a close friend. He points out things of interest, invites suggestions, nudges one to see new things. (Give Maitland quote XXX). One imagines that the outward projection of this dialogue, as one between author and listener or reader, was very close to the kind of, perhaps only partly conscious, dialogue that the authors pursued within themselves year after year. Smith with his mouthing of conversations with invisible people is perhaps the most explicitly doing this, but the others give hints that they stood both outside and inside themselves, holding debates over the issues which concerned them and then writing these debates down so that we can participate in them.

Another way of understanding these writers is to see that they attempted to involve their readers in a

¹⁶Koestler, *Creation*, p.649

¹⁷Koestler, *Creation*, p.398

¹⁸Koestler, *Creation*, p.337

journey with them. They recognized the need to make abstract ideas concrete and to unfold the truth over time. As we saw particularly with Tocqueville, whose work was often a semi-narrative of a journey of exploration, so it was with the others - an autobiographical narrative disguised as large books of social and philosophical analysis.

The difficulties of conducting these internal debates and then of making them explicit and formally specifiable, saying in imprecise and misleading words, what had originally been worked out only partially with words, partly accounts for the many passages in all their works concerning the strain of writing. Montesquieu gives graphic accounts of the constant revising, re-ordering, erasing and then replacing. The first creative vision might take weeks or only minutes, but then through the years this had to be translated from the inner recesses of the mind to an inattentive, muddled and incomprehending world, full of other distractions and prejudices. Many, perhaps most, people think wonderful thoughts, but those slow years of struggling [cf T.S. Elliot quote - trying to say with words] with the attempt to convey the vision to others stifles the vision. Smith and Tocqueville as well as Montesquieu recount the long grind, the disorder as thoughts come out, the frequent feeling that one has lost the thread, forgotten what the problem was, the slowness of the progress. Each was engaged in a massive re-arrangement of their own conceptual space, and then the second task of re-arranging that of others. Weariness and loss of confidence as they near what we, but not they, know to be the peak, emanate from their writing. All this is part of the creative process.

Of course there are a few tools which help the thinker on his or her way and our four made use of some or all of them. Ideas, important and less so, occur at unexpected moments and certainly Montesquieu, Tocqueville and Fukuzawa, jotted them down on paper and Montesquieu's **Pensees** are famous, Tocqueville's travel notebooks in America and England, Fukuzawa's notes scribbled over the years in **The Greater Learning for Women** are examples. Then there were more formal notes on particular subjects, whether Montesquieu's **Spicilege** or Commonplace books, Tocqueville's notes on his archival reading, Fukuzawa's extensive notes on his reading and travel. Smith's manuscripts were nearly all destroyed, but however mighty his memory, it seems likely that he also kept notes. How these thinkers cross-referred and indexed their libraries, thoughts and notes is, sadly, unclear. Nor is it clear how they actually **read** books, though Lowes' remark about Coleridge could be extended to all of them: **'How did Coleridge actually read books?** Few more significant questions can be asked about any man, and about Coleridge probably none.¹⁹ The methods of reading, indexing and accumulating data over long periods are crucial. Yet however good such systems, they will not necessarily lead to creative thought, but as Stibic writes concerning creativity, 'In such a subconscious process, technical means cannot help directly. Nonetheless, they can create advantageous conditions for the 'moment of creation', helping to initiate the unknown process in the dark space of the human brain.'²⁰

Those who have thought about the deeper mysteries of the conditions for high-level creativity have noticed certain recurrent patterns. One of these is that the kind of deep and sustained and freely-associating activity needed to re-think a paradigm requires periods of seclusion. The period of 'deep thought' is one where the individual relaxes and lets his mind roam in a frictionless way. Koestler alludes to 'The poets or the mathematician's trance-like condition while he concentrates on a problem.'²¹ This is a time, "'When ideas," says Locke, "float in our Mind, without any reflection or regard of the Understanding, it is that which the French call **Revery**; our Language has scarce a name for it."²² It is memorably caught in Yeats' poem **The Long-Legged Fly** which describes three such great turning points in revery, with its refrain 'Like a long-legged fly upon the water, the mind moves upon silence.'

¹⁹Lowes, Xanadu, p.30

²⁰Stibic, Tools, p.19

²¹Koestler, Creation, p.161

²²Lowes, Xanadu, p.281

To attain and maintain for periods such a state usually requires retirement from the bustle of the world, although Descartes time in the bread oven was only part of his retirement - being anonymous in the great city of Amsterdam allowed just as much peace. Another famous example is Malthus. 'Malthus prefaced his **Essay** with the remark that he wrote it on an impulse and in isolation, having retreated to a country seat where he was without the benefit (or distraction) of libraries full of data or the subtleties of the latest arguments.'²³

All of our European thinkers give ample evidence of the necessity of retirement into peace, of Wordsworth's 'emotion recollected in tranquility.' Montesquieu retired into his moated castle, and if there were still too many distractions in the library withdrew into a tiny cell in the wall. Smith quietly worked in his house in Kirkcaldy, full of contentment and with a beautiful view and a garden down to the sea. Tocqueville retired to a garret in Paris for the first **Democracy** and then later to a special room in the Norman countryside. All three found tranquility, which given the quiet austerity of a Japanese home life and housing Fukuzawa presumably also attained. In all these cases the tranquility lay not only in the physical lay-out, the boundaries that cut them off from interruptions, but the peaceful surroundings - the walks through the Gascon estate, the walks along the Firth of Forth, the walks through the Normandy woods or on wet days in a specially designed covered corridor. All had their equivalents to Darwin's famous 'thinking path' of the 'philosopher's walk' at Kyoto. And all of them found that inner tranquility guarded by loving women, Montesquieu, Tocqueville and Fukuzawa by their wives, Smith by his mother and cousin. Thus all of them hibernated for periods, pursuing ideas in calm and continuously free from financial, political or other worries.

Interestingly, these cases also tend to support the view that the best conditions for creativity lie in the tension or alternation between steady, explicit, concentration, and letting the mind relax and even consciously become involved in other things. This tension or alternation is very well described by Max Weber. [N.B. also used before] 'Both, enthusiasm and work, and above all both of them jointly, can entice the idea. Ideas occur to us when they please, not when it pleases us. The best ideas do indeed occur to one's mind in the way in which Ihering describes it: when smoking a cigar on the sofa; or as Helmholtz states of himself with scientific exactitude: when taking a walk on a slowly ascending street; or in a similar way. In any case, ideas come when we do not expect them, and now when we are brooding and searching at our desks. Yet ideas would certainly not come to mind had we not brooded at our desks and searched for answers with passionate devotion.'²⁴ Poincare describes this stretching then relaxing of the mind as follows. 'This unconscious work...is not possible, or in any case not fruitful, **unless it is first preceded and then followed by a period of conscious work...**'²⁵ Too much steady, explicit, concentration will not provide the answers at this meta-level. By definition, if the answers could be arrived at by hard work and simple logic, they would have been discovered by many others. What is needed is conscious attention, the filling of the conceptual space with data, and then to relax. 'A wise thinker, keen on any kind of discovery, never wearies himself to exhaustion by pursuing one line of investigation to the exclusion of every other, unceasingly, unrestingly; he knows that after careful work he can safely leave the sub-conscious activities to contribute their share to the final solution.'²⁶

One way in which this automatically happens to most of us is through the process of sleep - and hence the numerous stories of those who have seen the solutions to problems in that relaxed moment between sleeping and waking. Einstein's discovery of the theory of relativity in such a moment is the most notable. Another example, from literature, complements it. Charlotte Bronte wrote "...had thought intently on it for many and many a night before falling to sleep - wondering what it was like, or how it would be - till

²³Coleman (Ed), Population Theory, p.131

²⁴Weber, From Max Weber, p.136

²⁵Lowest, Xanadu, p.58

²⁶Knowlson, Originality, p.98

at length, sometimes after the progress of her story had been arrested at this one point for weeks, she wakened up in the morning with all clear before her, as if she had in reality gone through the experience, and then could describe it word for word, as it had happened."²⁷ As Knowlson writes generally, "The "method" employed is the one that has been used from time immemorial: our forefathers always filled their minds with an urgent problem before going to sleep, experience having taught them what a solution might be expected one fine morning."²⁸

Yet one did not have to leave it to sleep. Other forms of relaxation might also work - hence the long walks and listening to music or other activities. "The true method, according to Poincare, is to work diligently for a period, then to turn to a new source of interest. In this connection one recalls a striking comment from the pen of another Frenchman: "Since I studied nothing I have learnt much. It is indeed in our leisurely strolls that our great intellectual and moral discoveries are made."²⁹ From Descartes, whom we are told slept a 'great deal' and 'particularly recommends idleness as necessary to the production of good work'³⁰ through to Alfred Russell Wallace, who 'often said he was lazy. "His idleness," said one who knew him, "was his way of describing his long musings, waiting the bidding of her whom God inspires - Truth, who often hides her face from the clouded eyes of man. For hours, days, weeks, he was disinclined to work."³¹ There are numerous cases of the major role of the relaxed mind.

Yet of course the mind could become too relaxed. As Burkhardt warned, 'In times of complete calm on the other hand, private life with its interests and comforts weaves its web round the naturally creative mind and robs it of its greatness.'³² It is probably wise to be actively relaxed, hence the walking or sometimes more strenuous activity. Since the aim is to divert the mind, to let the surface be engaged in some alternative activity so that the problem is not constantly too close, it is often good to be **doing** something - whether practical things like gardening or listening to music. At a more energetic level it may be useful to stretch them find in other directions. This lies behind Koestler's advice that 'But to recapture the rest while magic in all its freshness, he must turn to something new; experimental theatre, avant-garde films, or Japanese Kabuki, perhaps; novel experiences which compel him to strain his imagination, in order to make sense of the seemingly absurd - to participate, and re-create.'³³ [used before XXX] There are thus two primary methods:- 'One of the primary conditions of inspiration is "that a period of close inquiry and reflection should be followed either by a change of subject or a period of mental inactivity."³⁴

All of our thinkers seem to have benefited from these different approaches. None of them complains of sleep problems. They all took practical, physical, exercise including walking. they constantly alternated periods of quiet reflection with periods of business. Both at the level of periods of years, and down to the individual day, they followed practices that are conducive to creativity. Their conceptual spaces were constantly being filled to overflowing with contradictory and puzzling data and they would then go off and think, relax, absorb, re-order, and create new and original patterns.

The combination of the patterns of their lives and the nature of their work methods put them all in a good position to make a major contribution. Yet they needed one further set of conditions to help them

²⁷ Knowlson, Originality, p.46

²⁸ Knowlson, Originality, p.46

²⁹ Knowlson, Originality, p.95

³⁰ Knowlson, Originality, p.95

³¹ Knowlson, Originality, p.96

³² Burkhardt, Reflections, p.159

³³ Koestler, Creation, p.336

³⁴ Knowlson, Originality, p.87

unify and order their experiences. These are the mental tools with which are operated half explicitly, half intuitively. At first they are logical operators or conceptual methods which have to be learnt. They are the grammar of thought, and like grammar they are learnt both by emulation, by conscious teaching, and by practice. The rules of thought or grammar which the four developed are particularly interesting since in developing it for themselves they at the same time developed some of the rules of thought or method which would form the basis for much of the best analysis from then onwards.

Theoretical methodology and faith

Our four thinkers explicitly tried to solve the contradictions and puzzles by developing a set of theoretical tools. Such tools would help them to know what data to look for and how to order it.

All of them were confident that what they were seeking for was a pattern or structure hidden beneath the surface of 'events'. Montesquieu sought to find the secret 'spirit' of the laws, Smith searched for the deep principles which led to wealth and order, Tocqueville sought to penetrate to the generative pattern which shaped aristocratic and democratic societies. Fukuzawa searched for the essence of civilization. Searching for this deeper level led them to the discoveries for which they are famous, the role of laws and customs and mores, the division of labour and the invisible hand, the institutional bases of civilization. The fact that all of the European thinkers were trained as lawyers, a profession which encourages the establishment of general principles which can be applied to particular cases, may be of fundamental importance here.

This search was based on a combination of dynamic and structural methodology. The dynamism came from the fact that all of them, in their ways, were very conscious of the movement of time. As figures in the Enlightenment they were imbued at least in part with the idea of progress of 'enlightenment', of stages through which societies normally passed. As we have seen, none of them saw progress as inevitable in the short run, and they saw the frequent reversals. But the belief that things moved from one type of civilization to another through long periods of time, and the sense that there was some kind of inner dynamic force within history, whether it was Montesquieu's vision of liberty, Smith's growing division of labour, Tocqueville's tide of equality, or Fukuzawa's civilizing process. This balanced mixture of hope of betterment, but honest recognition of the frequent reversal, gave them the framework to consider long stretches of history with insight.

The structural methodology can be seen in two important aspects. Firstly, they all saw the essential fact that analysis must concentrate on the **relations** between things and not things in themselves. It was the balance of dynamic forces, the tension, for instance, between political, economic, religious and social power and demands, that was crucial. Thus they concentrated on the **connections** and the nature of changing equilibria. We see this relational approach from the very first sentence of the **Spirit of the Laws** through to Fukuzawa's essay on **Civilization**. It was the separation, opposition, clash of forces that was their central concern.

This structural approach was necessarily founded on a holistic approach which saw the whole of the civilization they were considering as inter-linked. In order to understand any part, one had to understand it all. We see this in Montesquieu's ambition - he tried to construct all the intersecting patterns lying behind all the civilizations of his age and touched on everything. Likewise if we take Smith's complete works, there is very little he did not bring into his analysis, from science and literature through law, religion and politics, to economics. Similarly Tocqueville chose as his object the whole civilization of America, from top to bottom and side to side. Finally Fukuzawa tried to encompass the whole of western civilization, from technology to ideology. They believed that all the parts were linked and thus all needed to be considered. This search for an answer to large problems, rather than an attempt to study a particular period or place, explains why they are so inter-disciplinary and so difficult to classify. It is impossible to pigeon-hole any of them; they were sociologists, anthropologists, lawyers, philosophers,

economics, historians and many other things as well.

One might see behind their thought touches of that mechanical model of reality which we see in Descartes, Newton and other scientists of the seventeenth century. Just as nature was one vast 'machine' perhaps like a giant clock, which could be understood by taking it to bits to see how each part worked and then putting it together to see how the parts worked in relation to each other, likewise man's world, the social, mental and moral worlds that man had created, could be taken apart and re-assembled. They had a strong faith that there was order and laws to be discovered through the application of human reason. Without such a faith they could not have started on their massive task. Only with a belief or faith in interconnectedness will one find the connections.

In the search for the underlying shape of changing civilizations these thinkers developed and used others tools. One, often credited to Montesquieu, was 'ideal type' analysis. That is to say, as a first approximation he and the others developed somewhat simple models of types of civilization against which the complex data could be measured. This, of course, was famously later developed by Max Weber, but it is equally obvious with these four. Montesquieu explicitly used ideal types to characterize classical and modern civilizations, Smith gradually refined an ideal type model of early capitalism, 'aristocracy' and 'democracy' were for Tocqueville pure forms, benchmarks against which to measure the always mixed reality. Fukuzawa built up an ideal type of true civilization, measured against which much in the west increasingly failed to measure up.

One thing that is special about their 'ideal type' analysis was that it was dynamic. There is a danger that ideal types become a superior form of static classification to enable pigeon-holding. What all of our four thinkers tried to do was to see **moving** ideal types, what they often called 'tendencies' or 'natural laws', or the 'normal course of events', the way things 'usually happened'. Thus there might be a normal tendency towards increased predation as wealth increases or towards increased equality, or towards the increasing division of labour. Against such a 'normal tendency', the exceptions, the abnormal, becomes visible. It is an essential technique, used by Malthus, Darwin, Weber and most great thinkers. Write down what should happen over time and the puzzle about when it does not happen.

Such ideal-type analysis not only highlights the deviations and exceptions, it is absolutely necessary as a background for another of their major methods - the comparative approach. They were all doubly comparative. They all compared their own times with previous civilization. In the case of the European thinkers they went back to at least Rome and Greece. With Fukuzawa, the comparison could be done within his own lifetime, that is pre and post Meiji. They also compared across space, sometimes between different parts of their own continent, as with England, France, Scotland, Holland, or between continents, Europe, America, Japan. Both types of comparison had numerous effects on their theory.

The effects of the comparative method, both as explicitly used by our four thinkers and through the comparisons which they had experienced over their lives and through their travels, were numerous. It distanced them from the over-familiar. As David Hume wrote, 'the views the most familiar to us are apt, for that very reason, to escape us.'³⁵ Comparison made it possible for Montesquieu and Tocqueville to 'see' France, Smith to 'see' Scotland, and Fukuzawa to 'see' Japan. Especially powerful was the effect of placing themselves, so to speak, right outside their own civilization, to look back from a great distance. Montesquieu and Smith chose China as their external fulcrum and Smith also used 'America', Tocqueville used 'America', Fukuzawa saw Japan from the 'west'. They could thus see the **whole** of Old European civilization as a single, possible, other, system - from outside as well as within.

³⁵Quoted in Dumont, Mandeville, p.19

Comparison also had the opposite effect, by familiarising the distant. Tocqueville was able to 'understand' America, for instance, because he constantly compared it to France, Fukuzawa understood America or Europe by comparing it to Japan.

Another function of comparison is to make absences visible. In studying a particular civilization many of the most interesting things are the absences. All of our thinkers could take account of those absences - whether it was the absence of iron in Japan, the absence of 'caste' in England, the absence of predatory violence in Scotland after 1745, or the absence of constitutional liberty in France, because of comparison.

Finally, comparison is the nearest social scientists can attain to a way of testing their theories to see if they have any general value. As Evans-Pritchard for example put it, 'if any general statements are to be made about social institutions they can only be made by comparison between the same type of institutions in a wide range of societies.'³⁶ For all these and other reasons the comparative method, in space and time, was central to our four thinkers. The power of these comparisons was made more powerful by the fact that they usually kept at least three civilizations in play - historically the Greeks, Romans, post-Renaissance Europe and the present in space, England, the Continent, America and, later, Japan. This increased the heuristic power very considerably, allowing true comparison (holding things constant) as well as straight contrasts.

Even with this powerful methodology and the mixture of confidence it generated, there were immense problems. One of the most important concerned what could be accepted as an explanation, a satisfactory causal analysis. Here again our thinkers developed very sophisticated techniques. From Montesquieu onwards they all laid heavy emphasis on multiple causation. Important changes in their world, whether it was the fall of the Roman Empire, the French Revolution, or liberty in America, were the result of innumerable chains of cause and consequence. They all searched for a prime mover, somewhere where their mind could rest. They usually started with geography and climate, as did Montesquieu and, to a certain extent, Tocqueville. But very soon all of them abandoned that as only one amongst other causes, shaped by, as much as it shaped, man. They almost all ended up with a set of causes amongst which custom, mores, law and other institutions, roots or origins ('point of departure') played a part.

They carefully held a balance between these explanations, avoiding any particular determinism, and also preserving that very difficult balance between chance and necessity. There were general, conditioning, causes which constrained men in their thoughts and actions. But there was also room for randomness, selection, personal decision. Preserving this precise balance between structural forces which lie below human observation and can only be uncovered by anthropology, sociology, psychology and economics, and the random effect of particular actions and thoughts of individuals, only to be uncovered by history, is one reason for their greatness. At their own level it made them both aware of the invisible constraints within which they worked, and also gave them confidence that they could think new thoughts and that their work could make a difference.

Finally, and related to all of the above, was their method of moving from 'fact' to 'theory'. All of these thinkers were in a sense heirs to the Newtonian revolution, that is to say they had grasped the fact that neither pure induction, working up from the facts, nor pure deduction, working out the theories first and then 'testing' them was sufficient. From Montesquieu, with his mixture of induction and deduction, through Smith with his mixing of detailed factual analysis where facts existed and then 'conjectural' method where they were hard to come by, through Tocqueville, who worried people that he had 'begun

³⁶Evans-Pritchard, *Comparative Method*, p.3

to think before he had learned anything', through to Fukuzawa who as a student of J.S. Mill was constantly guessing, testing, experimenting and then guessing, we find a mixture of the two operations. Thus problems, data and estate of knowledge were among the factors that dictated the method. Sometimes one knew the outcome and had to use the analytic method to work back along the chain of causes to the original root causes. Other times one had a phenomenon and had to move forward by the synthetic method to explore its likely consequences.

In the end such methods were just tools and could only be judged by results. One selected the right tool for each job and should not become doctrinaire about what was best. It is clear that all of these methods were used, comparing, contrasting, working back and forth along chains of cause, comparing reality to simplified model, deconstructing into parts and re-assembling and so on. The very considerable advances these thinkers made in solving part of the 'Riddle of the World' thus stemmed not only from their lives and working methods, but from developments in logic and method which had incorporated ideas dating back to the Greeks and Arabs. Without mathematics, just as without other branches of philosophy, they would have made little progress. Their ideas, passed on through J.S. Mill and later Durkheim, Weber and others have shaped the ways we investigate the world just as much as they have shaped the political and economic institutions, democracy and capitalism, which now dominate the globe.

Conclusion

Having considered the lives, methods and theoretical tools together we can see a little more clearly how the mediation between a changing world and a major paradigm shift can occur. The Enlightenment was more than an intellectual movement; it was a new cosmological system erected to make sense of and underpin a new industrial, egalitarian and individualistic world. It was the story which people told to themselves and each other to make sense of the half-glimpsed new forces around them. New connections were being daily made in the physical and cultural world and these great thinkers absorbed these to a deep level of their being and then, having shifted and re-ordered them, brought them forth again in their crowning words - the **Spirit, Wealth, Democracy, Civilization**. We have thus been able to see below the final creative outpouring to some of its subterranean chambers. We have followed 'Alph the sacred river through 'caverns measureless to man' down to the sunless sea, watched it gathering force until it exploded in a new creative synthesis, suffusing for a moment at least, all of our thinkers with that highest form of insane pleasure: 'Beware, beware...for he on honey dew hath fed, and drunk the milk of paradise.'