

**Nft was first online 23 October 2001**, but was in development, project-wise, for a couple of years previous to this. The realization that an accumulation of notes, relating to various current personal projects, that may well be of use to others, thus prompted the Nft website.

The first file was the **Solar Manual**, based on inheriting, and caring for, a simple neglected solar system that was failing, viz, by understanding it, and subsequently rehabilitating the system to optimal working condition.

Since then, lead acid batteries are increasingly being surpassed by Li-ion. But, the principles of caring for such PV systems remains the same, specific battery maintenance details apart, plus, the advance of solar power continues in those countries sufficiently awake to PV potential, and the potential environmental benefits. Other forms of alternative energy also continue to develop, utilising, where practical, battery storage on large or small scales.

**Environmental deterioration**, including **climate change/global warming/ocean warming/atmospheric warming** are now matters of major concern, the current media headlines should speak for themselves, yet without political will, commonsense economics, plus, real public involvement, including careful recycling as practicable, will all be stalled, and carbon dioxide emissions, and other GHGs, will continue to rise. **Business and industry must be proactive**, with minimal 'phasing-in' time, protracted inaction may sustain a cosy financial status quo, but, with ever more drastic environmental consequences looming as a result.

**Winemaking**, and the accompanying note-making since posted on Nft, was also concurrent, a traditional domestic activity with a wider knowledge involvement, being always interesting, satisfying, and rewarding. Also increasingly affected by climate changes, in relation to grape and fruit production..?

**Computers and IT** are, collectively, the biggest Nft files, with most research involved. Nft was observing and participating in a mini-industrial/technological revolution, increasingly involving Open Source as well as proprietary software, plus, ever-evolving hardware and performance changes. **Open Source deserves respect**, is also gaining more impetus, and, Linux OSs are just getting better and better. The IT industry is subject to the faults and failings of any human enterprise, especially involving money, and reluctance to share 'financially sensitive' information. However, real, and sound, IT knowledge, plus reliable sources, are listed in the Nft computer webfiles. History and social implications of IT were an integral part of this learning experience, another ever-evolving study. For those interested, **Nft maintains a 'library' of installed and updated Linux OSs, from which to select for an optimal match for any given system.**

Note that Nft had a troubled early time online, various lessons were learnt the hard way, see **the Public Information Website file**, for useful and cautionary details in this regard, no need for others to experience similar frustrations when timely useful information can counter this, surely...?

**Files are updated as new information and/new links emerge, new files are added and similarly developed.**

As ever, **the Internet is the world's biggest library**, or, the world's biggest garbage bin, ie, an idiot box is that particular artefact that an idiot is interacting with at any given time. **Good use easily becomes mis-use, depending on the individual or group participating.** Commercial and social web interactions have added yet more dimensions to this, and again, not always positive. **Data-gathering** is always about numbers, important in respect of making money, whatever this means, thus, cultural restraints are set aside as humans look for ways of commercially exploiting the online world. This also includes invoking **validity of personal identity in numbers**, often, as a consequence, including 'validating' fringe and/or antisocial behaviour.

**'Rent-a-personality'** is thus easily achieved online, also blurring lines with personal and social boundaries of reality. When humans 'choose' a personality or following, this is more likely to enhance the darker side of an individual's personality, hard work is otherwise involved instead of maintaining sensible personal balance, thus, the power 'to be whatever the individual wants to be' easily outstrips reasonable social perspective, and anonymity and avatar ascriptions reinforce this.

**'Rent a cause'** has similar consequences, and the sureness of being 'right' when others are 'wrong' similarly validates extreme and/or anti-social behaviour, thus, in both of these cases, collective 'non-conscience' and mob rule soon prevail, online anonymity potentiating social and personal hazards. Conspiracy theories are also no substitute for proper knowledge, gained by comparative personal education, given enough personal effort to achieve this... Plus, addiction to self-righteousness increasingly blinkers any search for reason...? **Dopamine, adrenalin**, et al, means self-dosing is thus endlessly stimulated, and by ever-increasing thresholds of stimulation...? Gaming and social media use are also implicated....and this is increasingly reinforced, in turn, by commercial interests tricks involving 'monetization'.

**The rush to push IT limits poses new threats to human social stability**...on the one hand, pushing the boundaries of technology, to see what make result, soon outstrips the concerns of social or environmental consequences. On the other hand, there must always be ethical considerations practised by the innovators rather than just saying **'we just invent, yours to use or misuse'**, atomic energy being one infamous case in point. In regard to claims of the boundless potential of AI, Carl Weizenbaum's 1975 **'Computer Power and Human Reason'** was indeed prescient. Hence also, the concerns expressed, regarding ill-considered robotic development, in the Robotics file, re enlarging the scope of **Asimov's Laws of Robotics.**

**There is also a new concept relating to the increasing impetus to develop robotics, as well as general AI...the 'Alignment Problem', involving ensuring 'human/humane' values are inculcated into the products of these new developments. However, how successful this will be, is anyone's guess, as intra-species alignment of human/humane values is definitely still a haphazard work-in-progress...**

**Apart from which, when the 'Singularity' arrives, will humans become (possibly disposable) robots' 'pets', kept amused by digital toys, virtual reality, and other games... ? Certainly, that seems to be the current mass trend, already engendered by those who would force current robotic development, funded by financial inequality and consumer cupidity...? **Brave New World** versus **1984...BNW** for those who willingly acquiesce, **1984** reality for those who protest...**

**Education in the Age of the Computer** has brought new concerns re screens in schools, and, deleterious effects of screen time on child brain development, plus, a lack of information retention, because, association promoted by hand-writing and note-taking, is less-utilised, meaning loss of the most important step is thus foregone, re memory association, so important for learning retention. Similarly, active discussion is neglected, so necessary for perspective and informed analysis, plus, increased ease of access to 'facts', without regard to origin, reason, and rigorous discussion, further trivialises basic learning, including social and cultural education. Plus, of course, the ever-present learning displacement-activity opportunities of email, texting, web-surfing, et al, resulting in garbage-in-garbage-out, plus, consequential decreased attention-span. Personal media also enables cheating, via these personal media gadgets, at exam time. **IT gadgets mixed with learning may thus engender over-confidence, and yet, ease of cyberspace linking still means sources need proper scrutiny.**

**It takes a village to raise a child, so the saying goes, plus, these days, more like a global village, aka a comprehensive, comparative education, and, within an informed and educated liberal society. So, the Internet, (plus Social Media), is not the village to raise a child, only one part of the experience of that all-important comparative education.** Similarly, civic responsibility, freedom of information, political objectivity, and, less us-versus-them confrontation, must be taught, and widely practiced, within that society.

'.. how much good might be accomplished if every child had a brain-based assessment and, if problems were found, a tailor-made program created to strengthen essential areas in the early years, when neuroplasticity is greatest. It is far better to nip brain problems in the bud than to allow the child to wire into his brain the idea that he is "stupid," begin to hate school and learning, and stop work in the weakened area, losing whatever strength he may have. Younger children often progress more quickly through brain exercises than do adolescents, perhaps because in an immature brain the number of connections among neurons, or synapses, is 50 percent greater than in the adult brain.

**When we reach adolescence, a massive "pruning back" operation begins in the brain, and synaptic connections and neurons that have not been used extensively suddenly die off—a classic case of "use it or lose it."** It is probably best to strengthen weakened areas while all this extra cortical real estate is available. Still, brain-based assessments can be helpful all through school and even in college and university, when many students who did well in high school fail because their weak brain functions are overloaded by the increased demand. Even apart from these crises, every adult could benefit from a brain-based cognitive assessment, a cognitive fitness test, to help them better understand their own brain.' p. 42,

[https://www.goodreads.com/book/show/570172.The\\_Brain\\_that\\_Changes\\_Itself](https://www.goodreads.com/book/show/570172.The_Brain_that_Changes_Itself)

*So, beware, intellectual development, at any human age, narrowed and constricted by lack of comparative education, overuse of the Internet, misuse of social media, brainwashing, early school leaving, cults, conspiracy theories, et al.....*

**Considering the long expansion of technology, and now its exponential acceleration, 3 books provide useful perspective:**

**Medieval Technology and Social Change**, Lynn White, Clarendon 1962, 194p ISBN 9780195002669 examines the role of technological innovation in the Middle Ages, and is a celebration of expanding labour-saving technology.

Kevin Kelly's **What Technology Wants**, (Viking Press, 2010, hardcover, 416 pages. ISBN 978-0-670-02215-1), is a rather bizarrely deterministic discussion of the development of technology, (or 'Technium'), however, Chapter 11 provides a very interesting view of Amish caution and trialling, as regards incorporating technology into their lives...**a lesson for any sensible society-at-large..?**

**The Coming Wave**, Mustafa Suleyman, (Bodley Head 2023, 332p, ISBN: 9781847927491), in direct contrast to Kelly's main theme, is a strong warning about technology proliferating and building on itself, by direct human agency, as well as by human permissiveness and passive acceptance.

**One of the great ironies of the Computer Age**, is that all that virtual data is potentially evanescent, only existing while there is any grid, or other electrical power, in a particular form that will support creation and storage of those all-important 0s and 1s... **Never have so many contributed so much time and resources to the creation of so much potential impermanence...** the good, the bad, the useful, the trivial, even as more accumulated knowledge/'knowledge' is being digitised. Fired clay tablets from millenia past have subsisted to this day, paper and digital forms never will, in such a future span of time...what will be the modern high-tech equivalent...carefully selected embossed pages formed of noble metals..? Embossed LP discs of noble metals, as per the Voyager precedent..? Clay tablets could, thus, still play a part, surely....?

**Specific language accuracy** does pertain, with the ongoing need for precise instructions, as per programming at least, to communicate with our IT systems, but, trends that babelise human language increasingly proliferate, in the real world of human mass-communication, viz, buzz words, and pre-emption of common words for arbitrary, trendy, and emotive reasons, et al, plus, abbreviated inter-personal communication via gadgets, of course.

Thus, a proper conventional dictionary is always important, for scope and shades of meaning, and again, for strong mental association, in contrast to simplified meanings too often encountered via online, or, via such as smartphone dictionary apps. **Any language learning is thus best done by immersion**, by traditional learning with pen and paper, word lists, and dictionaries, thesauruses, physical conversations, et al. Reliable historical sources add valuable cultural perspective, as in all human affairs. Learning a language, in an appropriate geographical and cultural environment, is still the linguistic ideal.

**Knowledge acquisition, merely as a byproduct of infotainment, also looms**, evanescent or otherwise, and real objectivity, even freedom of expression, are both threatened, especially as the 'infotainment' will most like cater for the lowest common denominator, as well as for trending populism and/or political correctness, cancel culture, historical revisionism, et al. These facts may even threaten good governance, as the suggestible population is 'played on', like some cheap musical instrument....?

**Public Libraries** are a symbol of knowledge-sharing and universal education in a liberal democracy, especially where the maxim '**Question Everything, Without Fear or Favour**' still holds true. Sadly, where Nft is domiciled, books printed beyond 2000 are being dumped, literally and arbitrarily, unless they can be saved for second-hand sales. The National Library now only holds material of 'National' interest, so, the wider society is ripe for infliction of wanton historical revision, as are public libraries ripe for the domination of that particularly mindless anti-common-sense phenomenon, political correctness. **A 'book-burning' on a massive scale...country-wide....even world-wide, soon..?** Librarians without Tertiary qualifications, and/or Tertiary Science are a significant contributor to the general problem..? Library as Sheltered Workshop, indulgent of questionable personal agendas..? After all, public money bought those books....an informed and sensible public panel should make book purchase decisions, surely..?

Apart from which..many of the best the best publications re the history and development of the 3<sup>rd</sup> and 4<sup>th</sup> Industrial Revolutions, viz, Computer and IT age, Interconnectivity and Automation, were printed in the 90s, so, today, there are lots of electronic toys to play with, and no real perspective on their development use, social and individual implications, et al. How many local libraries now even have books on actual computer assembly and repair.....?

**LCD society here is being engineered by mediocratic administrators...** Our best are leaving, and, we do get good migrant replacements, but, from different cultures and backgrounds, who just want to fit in, hence that wellspring of Western thought, comparative education, without fear or favour, is being expediently eroded, and, by *ourselves*, a result of *non-involved 'democracy'*. Education run by mediocrities ensures no class streaming, favouring the LCD, so the brightest languish, especially in state schools. Comprehensive and comparative education, at all levels, is under threat, and what remains is increasingly 'monetised', thus favouring elites. Another very worrying trend is number-crunching functionaries in charge of medical centres and hospitals...with no medical training, and, of course, no Hippocratic oath...

**Question for the 23rd Century...when is a community, or nation, really that, or, when is it just a gang..?** Communities are now being replaced by gangs and gang mentalities, plus, of course, 'round up the usual scapegoats'..? Especially Online....consequently, freedom is increasingly a self-written licence, especially of thought...? For some, virtual existence shades into physical reality, which shades into self-righteous anarchy. **Social media, therefore, does not a liberal education make...? Takes a village to raise a child, but, this MUST start with liberally educated parents, in a house with plenty of books, and then beyond, supported by a community/society with the same outlook..?**

**Perhaps humans cannot deal with unlimited freedom**, because consequent very shortsighted views will inevitably result in chaos/anarchy....one man's utopia is another's social nightmare..? 'Question everything, without fear or favour' is degenerating into a new intellectual dark age of 'think not, but believe', fuelled by political correctness, book-burning and historical revisionism, plus, the rise of social media as a perceived substitute for an education, and, the engendering of conspiracy theories as a substitute for worthwhile intellectual endeavour, or cultural development. **Gangs are not societies, nor are mere societies civilisations.**

**So, to sum up 25 years perspective of Nft..?** Well, how about, the more things have changed, the more they remain the same...and now even more so..? The individual must thus take responsibility, where possible, for their own actions, avoiding ideological entanglements and pitfalls, also fake news and fake knowledge. Restrain careless and/or irresponsible online activities, seek multiple knowledge sources of good reputation, continually polling informed fellow-humans for added perspective. Plus, be critical, systematic, and organised, and strive to maintain optimal personal objectivity. Raise your children with access to books, and traditional learning methods, plus, be constantly involved in this process, as mentor, guardian, and model. **Apart from which, if you actually do vote, make it count....**

**PS: in the recent time of Covid-19**, once again, 'how about, the more things have changed, the more they remain the same...and now even more so..?' Viz, one result will be a human birth-rate bulge, as a direct result of the lockdown, and, more than enough for population replacement. Plus, expanding of economies will be rapidly resumed, at continuing cost to environment and resources, and, the biosphere will, once more, be re-burdended with the byproducts of human excesses, numbers, consumption, and resource depletion.... Mob psychology and companion feeding will again prevail, and, at the expense of comparative education, thus, little useful or relevant for the future will have been willingly learned by humans, conspiracy theories will abound, and, there will inevitably be more pandemics.....until there is, finally, one that cannot be contained...?