Environment, waste, and health

Much is being said about the environment these days. What is the environment? It is difficult to find concepts approximating or describing realities that are as encompassing and simultaneously conspicuous as the environment. It is a notion on par with concepts such as 'space', 'the seas', 'earth', which extends even further, without much effort and in the mind's eye, incorporating all archetypes into something close to what the word 'universe' conveys, though it is not quite as panoptic, and could be identified as the younger sibling of the old and inscrutable 'cosmos'.

It is this encompassing nature that helps enhance the feelings, the attention, the preoccupation, and comprehensive exposure that the environment triggers in new generations.

Our younger cohort is already used to hearing constantly about regional, national, and global issues and has grown bored with the lack of sound answers, the perennial recurrence of old problems (poverty, scarcity, sickness, war, death) and the frigidity of both the political class and society itself in what regards the health of human existence on the planet. It is only natural and sane that they choose to aim for something more extensive, more comprehensive, something that, by definition, will cover and overpower the apparent cause of all problems. ¹

Even though, when we consider the daily 'noise' we've grown to love and revere, these feelings are barely heard among the busyness of business and the daily crash of atrocities, the unending breaking of news, and the neatness of media players, fashion, and entertainment, it must be said that these young voices do have a point. Their point is logical, reasonable, and poignant.

Young generations recognise first sympathetically and then – not too long after – when hit by the harsh reality of drastic reductions in their actual prospects of survival, that the world we have created is wasteful and sick. The world stinks and it is those areas we have managed to populate the most that stink the most. Their putrid pong extends without remission, invariably, and pollutes both the present and our future.

waste

There is an element of waste in everything we undertake, this be organically generated waste or that produced through the artifice of invention. The problem with waste is not that it exists but that it is not managed to consider the consequences of its accumulation. ² This is particularly true of waste produced as a result of the artifice of invention, that is, non-organic waste. The production and mismanagement of organic

Environment, waste, and health

¹ I believe I can identify with today's younger generations because of a strong exposure to nature during my childhood in Spain granted by my father's love of the outdoors but also by the fact that there already was information on what we then called 'ecology' available to all in magazines such as 'Integral' as early as the late 1970s. It is good to see that the magazine is still going strong today: https://www.larevistaintegral.net/

² It is important to look at all arguments and at the record of what has been achieved (or not) so far regarding nuclear waste for example as well as of what may yet be achieved in other fields of technology. Here are two lines of analysis: https://www.linkedin.com/feed/update/urn:li:activity:7080188879542046721/ https://www.mobilenewscwp.co.uk/News/article/operators-pledge-refurbish-receyle-take-backs-devices-2030

waste however, also has, as we see its volumes increasing in the growth of civilisation, a nefarious effect.

There are two basic pre-conditions to the proliferation and mismanagement of waste.

The first is our populations' geographical concentration in non-self-reliant residential hubs such as towns and cities; the second is waste produced through the performance of wasteful activities. These two generic facts combine to create an unsustainable reality the consequences of which humans keep on burying out of sight, hidden from their immediate consciousness until their 'produce' is either brought into the light by those directly affected, or else official sources seek the support of science in establishing facts that impel us to change trajectory, stop certain activities, and rethink our conventions and expectations.

Therefore, the trend that broke into the limelight back in the 1970s has now taken top spot in the popularity charts. ³

Population concentration is directly linked to the nature of government, and the monitoring and control of assets, be these costly infrastructure, expensive services, or the valuable human resources themselves. To administer a society, it is essential to count and account for all existing assets, to plan, to budget, to design and establish essential services, and to ensure sufficient revenue is generated through taxation to cater for the needs of the population.

Whether by design or as a consequence of the pull of power and greed (I will not get into conspiracy theories), ⁴ population concentration into ever expanding residential hubs such as towns and cities requires of humans in those environments that they adhere to two important factors: extreme specialisation and structured mobility.

Specialisation inevitably breeds dependence while **structured mobility**, which includes making ever more remote production sites accessible to the growing urban populations, necessitates the implementation of constrictive measures to limit the cost of servicing communities.

'15-minute cities', the use of the IoT (Internet of Things) and the associated bank branch closures, the growth of supermarket chains and of prefabricated/mass-produced/processed consumables, as well as the more recent phenomenon of bringing industrial and agricultural production 'back home' or 're-shoring' because of supply chain unaffordability, are some of the symptoms of this realisation. ⁵

The main cause for such forced specialisation may be masked by the apparent abundance (often disregarding deep social inequalities) generated by population

³ It must also be said that whatever awareness may have been raised about the environment over the last half a century, has often been (especially at its inception) raised in disregard of old knowledge, growers and farmers especially, have accumulated over centuries and which, perhaps unsurprisingly, has been gradually 'making a comeback'.

 $^{^{\}rm 4}$ Refer to the chapter 'Regulation', 'Business', and 'Finance' within this volume.

⁵ https://www.weforum.org/agenda/2021/11/15minute-city-falls-short/, https://www.ioscm.com/blog/reshoring-manufacturing-bringing-production-back-home/, https://lordslibrary.parliament.uk/closure-of-high-street-banks-impact-on-local-communities/

concentration in ever more reduced geographical environments, but it is there for all to discover and reflect upon. ⁶

The closer we choose to live with each other, the lesser the space between the unfolding of our individual daily lives, the larger the abundance of similar sets of skills clashing and or competing with each other and, consequently, the greater the necessity for differentiation in the provision of comparable services and products.

When like services and products vie for a place in a concentrated market and define the ability to survive of those providing them, the refining of market strategies, tactics, and two very specific phenomena will occur: market saturation ⁷ and market consolidation or monopolisation. ⁸ The value and supply chains, based on such constrictive developments move then sequentially towards finer segmentation and the extreme specialisation of activities, tasks, and roles with an ever-reduced scope of skill and responsibility attached to and expected of each of them, unsurprisingly curtailing the potential for personal and societal growth and the skills acquisition levels of all those living within such ecosystem.

In effect, such specialisation carries with it a 'dumbing down' of the general population as its levels of involvement become reduced and constrained to very limited and very specific activities, and the majority of its active time (say 40 hours/working week) is spent on what may end up becoming meaningless and or unchallenging tasks while the rest of tasks and basic activities needed for its survival are effectively carried out by 'the specialist other' for a fee. ⁹

For its part, the **creation of waste** that ensues us undertaking wasteful activities, is perhaps the most illogical and incomprehensible phenomenon of all, directly linked as it is to extreme specialisation and the concurrent loss of basic survival skills.

For example, it can be argued comfortably that the ability to grow at least a basic portion of one's own food has been completely lost in urban populations. So has the

⁶ It is interesting to note that fresh fish and seafood is often more readily available and cheaper to acquire in large quantities within large metropolitan conurbations such as capital cities than in the port locations where they originate.

⁷ You may find here the standard strategic response to the phenomenon of market saturation: https://www.strategicadvisorboard.com/blog-posts/surviving-a-saturated-market-differentiation-strategies-that-work

We read in Section 2 of <a href="https://fastercapital.com/content/Market-Consolidation--The-Game-Changer--Market-Consolidation-Through-Strategic-Mergers.html#The-Driving-Forces-Behind-Strategic-Mergers: "Strategic mergers have become a cornerstone of market consolidation, serving as a catalyst for transformation within industries. These mergers are driven by the pursuit of various synergistic benefits that promise to bolster the competitive edge of the entities involved. The rationale behind such alliances often stems from a desire to achieve economies of scale, expand market reach, diversify product offerings, or acquire new technologies and skill sets. As companies strive to navigate an increasingly complex and dynamic.business.environment, strategic mergers offer a pathway to not only survive but thrive amidst the challenges. From the perspective of financial stability, mergers can provide a lifeline to companies facing volatile market conditions. By combining resources, companies can create a more robust financial framework capable of withstanding economic pressures. Moreover, the integration of complementary assets allows for the optimization of operational efficiencies, leading to cost reductions and improved profit margins."

⁹ T. W. Malone, R. Laubacher, and T. Johns write in their article 'The Age of Hyperspecialization': "Managers who want to capitalize on hyperspecialization's possibilities need to learn how best to divide knowledge work into discrete tasks, recruit specialized workers, ensure the quality of the work, and integrate the pieces into a final whole. Meanwhile, companies and governments must be aware of the potential perils of this new age: "digital sweatshops" and other forms of worker exploitation; nefarious schemes hidden behind task atomization; work that becomes dull and meaningless; increased electronic surveillance of workers. All these, the authors believe, could be ameliorated by global rules and practices and a new form of "guilds" to provide workers with a sense of community and support for professional development." July–August 2011 issue of Harvard Business Review.

ability to make one's own clothing, build or even maintain one's own place of abode, or dispose of one's trash. All these traditional yet essential skills and activities have been put aside and even forgotten by most populations in urban centres and are effectively outsourced to business and government.

The setup and effective running of **structured mobility** becomes a necessity, as the government local councils and private firms now undertake to cater for the needs of ever-increasing and concentrated communities requiring similar aggregate levels of service as well as the infrastructure and resources to carry them out.

The waste that arises from absorbing centrally the service needs (rubbish collection, recycling, transport provision, etc.) is then multiplied ad infinitum in terms of quantity obviously, but also in what regards the economic, performance, and resulting failure burdens, as the population grows and must be supported by an increased number of investments to be paid for by the taxpayer and the profit-driven interests of private stakeholders.

Individual responsibility and ability are transferred to local government under the overall guidance and financial allocation rules of the central government making what were originally simple tasks managed individually, a major burden affecting the individual and the state at levels which become more and more difficult to coordinate, and which increase exponentially the associated financial and performance risks as urban centres expand. ¹⁰

Such skills-transfer phenomenon equates to a reallocation of responsibility subsidised through the market and taxation but, importantly, remains the most wasteful and - we will soon see - unhealthy consequence of ever-growing and clustered urban centres. It results directly in the self-deprivation of humans of their ability to survive through a reliance on the proxy activities of conglomerates (be they private or public) and the ensuing, inevitable dependence that it triggers. Reliance on the state whether at local or central levels is possibly one of the greatest scourges of our societies.

The latest and yet more worrisome trend in this evolution towards extreme specialisation is the abdication of individual financial responsibilities and skills to corporate finance (or to the state through benefits and subsidies) whereby individuals contract themselves to debt-generating mechanisms (credit card debt, loans and others) which represent outsourced instruments to manage 'the Ins and the Outs' of personal finance, converting people into 'cogs in the machine', who go to and from work without much clue as to why they do so, apart from 'making it' day by day (living 'hand to mouth' or 'making ends meet'), with, at best, the whole daily endeavour being spiced up with scattered doses of entertainment-led distraction. ¹¹ The levels of wastefulness reached through such interactions in terms of lost human potential and basic time wasted (squandered productivity and profitability) may be immeasurable

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¹⁰ The appropriation of natural resources such as the water and energy supplies essential for the survival of citizens is yet another factor exacerbating this societal burden which I examine in the chapter 'Finance, debt, and credit growth' in the book.

¹¹ https://www.tandfonline.com/doi/full/10.1080/23311886.2021.1996919#d1e1376

and alerts us as to the real extent of the harm humanity is able to continually cause itself. 12

Waste created through wasteful activities can also be divided into two categories: the type that can be avoided, and the type that needs to be managed. To clarify, it is not the same 'to waste time' as it is 'to waste money' even though both are often 'thrown out' together into the same bin of generalisation.

The waste that can, may, and should be avoided is most often directly linked to human separation from the means of production (not in the Marxist sense). The fact that people in most urban environments can open a tap and are immediately able to use or drink water without, in effect, having to draw it from a well, fetch it from a river, or even filter or distil it, makes an excellent case for wasteful behaviour in the use of this essential survival resource.

The same is true for as many other essentials for survival we may be willing to consider. Our increased capacity for wasting what we should strive not to misuse is directly proportional to our self-willed, immediate separation from the physical environments and the lack of skills that would otherwise allow us to truly value and derive a sense of care and self-control empowering us to avoid this type of waste. ¹³

Simultaneously, the prevailing notion of 'market force' carries two foundational and mutually dependent concepts: **competition** and **choice**. Unfortunately, increased marketability is itself dependent on the fine tuning of competition and a substantial increase in the choice on offer to potential buyers tasked with the job of increasing business sales and profitability through their spending. I have focussed on competition elsewhere, ¹⁴ therefore will concentrate on the relationship between increased choice and waste here.

Choice may be dissected into two basic potential outcomes. I may choose to buy a bunch of celery or some leeks (for example) to help with my balanced diet preparations. I am choosing and the market gives me the choice between these (and other) vegetables that will facilitate the realisation of my objective: preparing a balanced meal. Concurrently, I also have the option or choice to buy a bar of soap or a bottle of

¹² Here is a perfect example of productivity and profitability outlined in detail that very few of us seem to be able to accomplish: "Who can find a virtuous wife? For her worth is far above rubies. The heart of her husband safely trusts her; So he will have no lack of gain. She does him good and not evil All the days of her life. She seeks wool and flax, And willingly works with her hands. She is like the merchant ships, She brings her food from afar. She also rises while it is yet night, And provides food for her household, And a portion for her maidservants. She considers a field and buys it; From her profits she plants a vineyard. She girds herself with strength, And strengthens her arms. She perceives that her merchandise is good, And her lamp does not go out by night. She stretches out her hands to the distaff, And her hand holds the spindle. She extends her hand to the poor, Yes, she reaches out her hands to the needy. She is not afraid of snow for her household, For all her household is clothed with scarlet. She makes tapestry for herself; Her clothing is fine linen and purple. Her husband is known in the gates, When he sits among the elders of the land. She makes linen garments and sells them, And supplies sashes for the merchants. Strength and honour are her clothing; She shall rejoice in time to come. She opens her mouth with wisdom, And on her tongue is the law of kindness. She watches over the ways of her household, And does not eat the bread of idleness. Her children rise up and call her blessed; Her husband also, and he praises her: "Many daughters have done well, But you excel them all." Charm is deceitful and beauty is passing, But a woman who fears the Lord, she shall be praised. Give her of the fruit of her hands, And let her own works praise her in the gates." Proverbs 31:10-31

¹³ It always amazes me how little water is needed to wash one's hands properly. A little spurt of water, even a few drops are sufficient to thoroughly apply the soap over the totality of both hands and rub clean whatever dirt may be there. Then, the rinsing, though taking a little more water, may be over and done within 10-20 seconds.

¹⁴ For an analysis on business competition and its effectiveness you may want to read: https://philpapers.org/rec/MARCPS-4

liquid shower gel to help me address another daily need, that of maintaining a reasonable level of hygiene for my body.

I posit that the first type of choice, a choice between two different kinds of vegetables in this example, provides sufficient variety not only to satisfy the requirements of a balance diet but also to fulfil the creation of wealth to in turn satisfy the reasonable needs of those who produce and market these vegetables. Regarding the soap and gel however, the choice is (in the large majority of circumstances – exceptions do exist) superfluous, and therefore unsustainable beyond actual demand. That is, demand for what should be the alternative (most probably the gel variety of soap) needs to be generated artificially, marketing and advertising need to be invested in, and a new, full supply chain needs to be established to deliver this type of choice. ¹⁵

In the first case – and budget supermarkets have based their business model on this ¹⁶ – the needs of customers are satisfied by business fulfilling a balanced price/choice proposition that provides single preference, or single brand choices for each of the varieties of product available (celery, etc.) while also providing an equivalent (not equal) choice in the form of nutrition and taste being offered through other varieties instead (leek, etc.).

Apart from the obvious decrease in terms of wastefulness that this strategy affords, it provides additional business advantages. Price competitiveness is derived from the basic fact that concentrating purchases on one staple product will always deliver supply advantages in terms of COGS. ¹⁷

Additionally, further waste is reduced, and less ill-effects are generated when such products (fruit and vegetables especially) follow the pattern of seasonal availability. Excesses in production may be accommodated through greater reductions in purchase cost which may or may not be passed on to consumers, allowing the business an opportunity to adjust its profit levels between product lines.

Reducing choice to what is naturally on offer across local geographies and seasons does not only reduce waste, but helps business and consumers self-regulate

¹⁵ Funnily enough, my son and I went to do the weekly shopping recently at our nearest supermarket and I noticed he was spending an inordinate amount of time in the 'personal hygiene' aisle. I asked what he was looking for and he answered: "I can't believe there are no bars of soap on sale. I hate using shower gel, it's so wasteful! It only lasts 5 or 6 times, and I have to come back here to get some more." He didn't know I had been writing this piece. Whether the unavailability of soap bars was due to shortage or to marketing choices by the supermarket I do not know, but the fact is that the general choice of gel-type soaps is much more extensive than that of the traditional bar of soap in all but specialised/minority shops and that through this artificially created 'demand replacement' process, the alternative has now become mainstream.

¹⁶ Obviously, much depends on the ethical application of this business model which, as everything else, may be misused and abused; by which I mean that a company may choose to select a reduced number of products in its offering by picking, for example, less healthy alternatives and somehow forcing its customers to accept genetically modified or lower quality produce. Separately, but perhaps as importantly (as I was reminded by my daughter), we must acknowledge the fact that no amount of so-called 'product choice' provided by supermarkets and other distributors is, in itself, a 'real choice' but helps to entrench the fallacy created by marketing promotion of a variety of options which, in the large majority of cases, differ little among themselves. Basically, when the need is simple, choice becomes irrelevant. Food and drink choice could be a much simpler and healthier proposition than it is today in our so-called 'advanced societies'.

¹⁷ COGS (Cost Of Goods Sold)

production, supply chain activity, and consumption while aiding them to manage their expectations and potentially increasing their overall health levels. ¹⁸

The reduction of redundant operations such as storage, sections, and frequency in the hub-transport network within a seasonally based model of production and supply eliminates consumption of essential resources such as electricity and fuels, thereby reducing costs, pollution, and waste.

There are drawbacks as well. Nature may not yield as expected and, as a consequence, a business and the consumer may not enjoy the availability, satisfaction, and profitability usually derived from certain products. Yet, even in such 'shortage' situations, if these are considered as impacting the region, the nation, and/or the world at large, and, if managed fairly and with a corresponding measure of 'good will', could and should help share the times of increase and wealth as well as, and perhaps as importantly, the times of dearth and want caused by droughts and other natural disasters.

On the other hand, products that are de facto duplicates of other basic commodities such as those exemplified in my soap and gel example above, are devoid from the outset from such self-regulation opportunity as their very existence is based on an artificial investment in their marketed success as replacements for the basic product they imitate.

Consequently, not only is the investment and effort wasted in case of failure, ¹⁹ but the waste generated to create an overpowering product to debunk the existing offering (competition at its best) is immeasurable both in its consequences, in the disruption it inflicts on existing networks, the potential implications (health concerns and others), ²⁰ and in the amount of time it may take to redress the disruption created. ²¹

That is, if my product takes over yours, where is your production going to go, to waste perhaps? ²² Where is your profit going to come from, from cutting cost perhaps? Where will your livelihood be secured, possibly in the diversification and creation of new offerings, new choices for the market? ²³

It has always proved hard for humans to understand or even realise that so much of what surrounds us – our environment – is marvellously inexplicable, mysterious even, both in the way it functions and in how it provides for our every need. And this challenge

¹⁸ https://health.umms.org/2022/04/05/seasonal-eating/

¹⁹ This happens continuously and can be illustrated in the endless count of 'single use' product development and launch processes such as prototype research, promotions, marketing/communication campaigns, seed ordering, production scheduling, 1st order express shipments, geographical availability on launch, and initial 'new product' offers, to name a few.

²⁰ The 2023 Ohio train disaster is an example in point: https://www.bbc.co.uk/news/world-us-canada-64642046

²¹ The violent nature of the business world is evident in the vocabulary now accepted as norm. The word 'disruption' has become part of the essential parlance and conceptual framework used in the drafting of business strategy, the teaching at business schools, and the selection of tactics and personnel used to increase market exposure, ROI, and profits across industries.

²² https://www.itv.com/news/2021-06-21/amazon-destroying-millions-of-items-of-unsold-stock-in-one-of-its-uk-warehouses-every-year-itv-news-investigation-finds

²³ https://www.statista.com/statistics/280195/generation-of-municipal-solid-waste-in-urban-areas-worldwide/-https://www.gov.uk/government/statistics/uk-waste-data/uk-statistics-on-waste

to our understanding is often tackled head-on by humans seeking to extract meaning, acquire knowledge, develop shortcuts, make things easier, more comfortable, 'better'.

Achieving progress through re-invention, through the acquisition of knowledge and its implementation in the creation of tools and processes that help us overcome sickness, improve our existence, increase production, secure the survival of future generations among many other positive things, has brought humanity to advances, innovative perspectives and instruments that, in themselves, appear as marvellous, mysterious, and as inexplicable as many of nature's processes.

We have set ourselves goals that are meant to bridge gaps in understanding, to overcome challenges that have plagued the world over centuries, and, in so doing, we have aimed further and further away from our inheritance in the earth. We have created machines that help us do things faster, run circles around the seasons, subvert weather patterns, extend life, cancel the effect of illness, and project our imagination, our dreams into realms physical and ephemeral no past generation could conceive of, let alone produce.

Satellites are a current and vivid example of this progression towards more innovation and challenge-bridging achievements. Yet, here too, and even if we choose to forget the extensive use of pollutants in the pursuit of extra-terrestrial endeavours, the waste (or space debris) being generated by satellites refutes the long-term, safe viability of these projects whatever it is that we achieve in the process.

Satellites typify both the distancing from our natural environment and an irresponsible seeking after knowledge first, and then profit. In fact, it is patently impossible for humans to reach for the dominion of space and the settling of other planets without outspending and marginalising the basis of the natural coexistence of the species on earth. ²⁴

Additionally, such enterprises rely on the creation of enormous amounts of present and future debt (future promise) at the expense of present generations and the disregard of more urgent worldwide, vital necessities. ²⁵

Waste is integral to the configuration of progress and predestines us, as we have by now become sorely aware of, to an increasing depletion of so-called unlimited resources whether they be material, time-related, or psychological, while it also has the clear and unavoidable consequence of accelerating humanity's collapse through

²⁴ https://www.nature.com/articles/s41598-021-89909-7 Satellite mega-constellations create risks in Low Earth Orbit, the atmosphere and on Earth – Aaron C. Boley & Michael Byers, 2021.

²⁵ As an example, this is what the latest edition (2023) of 'Pensions at a Glance 2023 - OECD and G20 Indicators' says of the changes in pensions due to changes in macroeconomics around the world: "On average, full-career average-wage workers will receive a net pension at 61% of net wages. Future net replacement rates are at 40% or below in Australia, Estonia, Ireland, Japan, Korea, Lithuania and Poland; they exceed 90% in Greece, the Netherlands, Portugal and Türkiye. The future net replacement rate of workers earning half the average wage is higher at 73% on average." https://www.oecd-ilibrary.org/finance-and-investment/pensions-at-a-glance-2023 678055dd-en

various ways of which the most pertinent in the past, now, and in the foreseeable future is an imminent decline in wellbeing accurately identified by younger generations. ²⁶

health

Wellbeing or health is the sole primary foundation of all the positive accomplishments humans may dare dream of or attempt. No other element of human life apart from the creation of life itself can in any way be considered fulfilling, successful, happy, or possible without a modicum of health.

Even when strong individuals are battered by the effects of illness or injury and still achieve success and fulfilment, this is only due to their reliance on a certain level of health that, albeit curtailed, still allows them to operate in the world, regardless of how many props, how much medicine or external help they may require.

Health means life, life is health, they are inseparable and continuously interdependent from conception in a woman's womb to that person's last breath on departing life at the conclusion of their existence on earth.

Yet physical health, if we were to reduce it to its most minimal expression could be summarised as the standard operation of three basic biological functions common to all humans. ²⁷ Can we say that we sleep, eat, and excrete well? If so, I dare say our health is good, sufficiently beneficial to our life and to the progression of our endeavours whatever these may be.

Never mind the simplicity, how many among us can say that we get the three basic bodily functions right? I dare say that 'not many' would be an accurate answer, especially in urban environments.

Sustained dysfunctional sleep patterns lead to unrest and the depletion of our body strength which in turn leads to a reduction in activity, to dependence, and to mental decay. Lack of nourishment leads to an inability to perform any activity and thus to dependence, delusional behaviours, and mental illness. Ailing patterns of excretion (whether otorhinolaryngological, via the bowel, the bladder, or via the skin) may result, over and above the combination of the two other bodily dysfunctions mentioned previously, from the ingestion of unnatural (processed) substances, pollutants, excesses in dietary control in either direction (too much or too little), and similarly lead

²⁶ 'World health statistics 2024' (WHO): "Populations in high-income and upper-middle-income countries continue to live longer and healthier lives than those in low- and lower-middle-income countries. However, the pace of improvement in high-income countries has stagnated since 2010, with only a 1.1-year increase in life expectancy and a 0.6-year increase in HALE [Healthy Life Expectancy at Birth] in 2010–2019, less than one third of the increases in low-income countries over the same period (1)." https://iris.who.int/bitstream/handle/10665/376869/9789240094703-eng.pdf?sequence=1, page 7.

²⁷ I purposefully omit mentioning other sentient beings such as animals and plants here because, in clear distinction to humans, these cannot do, implement, or apply things/strategies/treatments or even inflict death on themselves like humans can and in fact do. Their fate is inevitably tied to that of humanity, to its failures and to its successes. The Bible says, "26 Then God said, 'Let Us make man in Our image, according to Our likeness; let them have dominion over the fish of the sea, over the birds of the air, and over the cattle, over all the earth and over every creeping thing that creeps on the earth.' 27 So God created man in His own image; in the image of God He created him; male and female He created them. 28 Then God blessed them, and God said to them, "Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth." Genesis 1:26-28

to a reduction in productivity, to extended periods of inactivity, to dependence, drug consumption, and mental depletion.

The fine balance of rest, food intake, and waste disposal out of our bodies represents an essential factor we do not appear, despite the simplicity and self-regulatory nature of these innate bodily processes, to be able to manage well.

This phenomenon, this failure in managing natural, essential physical needs is exacerbated by our separation from the means of production through extreme specialisation and structured mobility, away from production sites and from the physical and mental efforts needed to produce and process the elementary substances required to procure ourselves a wholesome lifestyle.

If levels of health are impacted by our failure in supporting an environment that leads or facilitates the harmonious working of such basic bodily functions, it is reasonable to infer how a conducive environment that encourages the production and consumption of natural produce and the physical effort (otherwise called 'exercise') required to achieve it, may allow for a much smoother interoperation of these bodily functions without recourse to artificiality or its resulting waste.

The excess waste we generate through the artificial creation of wealth for wealth's sake not only restricts our engagement in health-generating endeavours, but it also decants on our bodies (and minds) a constant flow of trash.

The attempts at reducing poverty of which many countries and organisations around the world appear to be so proud of, while laudable in themselves, even when we choose to trust the statistics we are presented with, only manage to bring many more people into the same unhealthy cycle of so-called progress, creating other dependencies and sickness patterns that ultimately amount to the proliferation of advanced societies' blinkered approach to life.

Well-established institutions such as prisons, asylums, mental hospitals, hospices, as well as the increasing number of the homeless are either understood as solutions to societal problems or as de facto 'necessary evils', and are mainly caused by the phenomena of urbanisation, extreme specialisation, and structured mobility, all of which conflate to disenfranchise and effectively isolate to a place of no return those who have been deemed by their action or inaction to be unfit to participate in society.

These extreme yet well-accepted realities where no second chance can be given due to the rigidity in their conception and implementation mechanisms, become ever more common and unsustainable. ²⁸

As seen, such order of destitution and generated waste offers multiple, clear examples of where society doubles down on its design aims of population concentration and

²⁸ https://www.gov.uk/government/speeches/new-lord-chancellor-sets-out-measures-to-avert-prison-capacity-crisis

sovereignty of choice while illimitably increasing the occurrence of their waste and unhealthy biproducts.

Therefore, even though humans have been mis-represented as a 'plague' in the more extremist accounts of the woes of our planet, and though the comparison is far-fetched and goes against the good intentions claimed by governments and benefactors alike, it must be said that, in the sordid concentration of human life within urban centres, refugee camps, and centres of separation and imprisonment, the similitude appears to be quite accurate.

Of course, drawing such comparisons, even metaphorically, is bound to kindle the thought of the next actionable step. How do you deal with plagues? Extermination is the usual human answer. And of this kind of 'solution', sadly, horrifically, we have had, if we only care to go back 100 years, many examples. It must be acknowledged that with people such as Mao, Stalin, Hitler, and dozens of others like them, perhaps also discernible in individuals much closer in time to us today, we may reasonably want to accept that the resemblance and potential for such an outcome is remarkable. ²⁹ In fact, even though life within such centres of confinement is, in most cases, still conserved, it can hardly be called 'life' as we have known it and should expect it to be for all.

Throughout this cycle of progress, wastage, and loss of health in the exhaustion and constriction of our environment, humanity has remained aware and called out in various ways for a change in approach.

However, the systematic inclusion of goals, even 'change goals' ³⁰ typified in the battles against sickness carried out by science and medicine, by the study, prevention, and mitigation of natural disasters, and by the latest mass awareness about climate change and a need for wellbeing ³¹ into the mainstream government and business pattern of control and profitability, are without real regard for the results in terms of individual and community benefits, and become inevitably outstripped of meaning in favour of the prism of pride and greed whatever be the genuine efforts and concerns made and raised in the process.

If waste may be defined as all that is not being used for the growth and perpetuation of humanity, then health could be said to equate to all that is useful to this self-same objective.

It could be considered amiss to minimise such an expansive issue to that very simple definition; yet, recognising the simplicity and abiding by it at the individual level first and then at all levels in society requires acknowledgement, which, logically, should also trigger action.

 $^{^{30}}$ For my views on the business cycle, you may want read my essay 'On sustainability and consumer behaviour' within this book.

³¹ Growing advance societies' trends in 'work-life balance', 'mental health', 'exercise', 'diet', etc.