

Summary of Cradle to Cradle

Cradle to cradle is a philosophical book made up of plastic paper. The intriguing philosophy, "if we are going to help save our planet, then we need to make some sacrifices, share resources, perhaps even go without, since we are facing a world of limits" inspired me to not want stop reading the book.

The ideas covered regarding the way we misuse and need to use resources in our planet include:

The need to consider the materials making our products which we use in our daily life from the shoes we wear to the furniture in our homes; all these products may be made of materials which off-gas hence ending up in our bodies where they cause various diseases and deformities and/or polluting our environment. Most toys which we cherish buying for our kids, are made of these off-gassing materials hence, leading to unnoticeable insidious effect on humanity.

Our industries do not consider sorting their by-products according to biogradable or non-biogradable materials. Consumers also do not sort the packaging materials of the products from these industries. All these unsorted materials end up in landfills as waste material where they cause soil and water pollution. They emphasize on a need of sorting our waste into biogradable and non-biogradable, the former to replenish the biological cycles and the later to replenish the chemical cycle. Further, these industries release gases into the atmosphere which are very detrimental. These gases trap the radiated heat from the earth's surface a situation which brings about global warming.

Deforestation and coal mining have brought about climatic change, by causing rampant soil erosion and a release of carbon dioxide into the atmosphere respectively. Deforestation has depleted carbon sinks and robbed the soil its valuable organic matter a situation which has lead to man's quick solutions of using artificial fertilizers. These artificial fertilizers have a negative effect on our waters by causing excessive eutrophication.

The effects of detergents on the environment can not be overemphasized, they adversely affect our aquafaua and flora leading to ecosystem destabilization. Pollution of our water bodies through oil spills has caused the aquatic ecosystem a great loss, leading to imbalances in trophic levels.

Mechanized agriculture has brought about monocultures a situation which has lead to less biodiversity (simplified ecosystems), genetic drift among others. The herbicides kill the ground cover which shields the soil from heavy rain drops hence soil susceptibility to erosion. Also the soil is deprived of organic manure which mineralizes slowly to avail nutrients to the root systems and acts as a chelating agent to minerals.

The usage of energy is wanting. Instead of misusing energy to artificially light and heat our dwellings during day time they recommend that we can do it naturally (i.e. by constructing houses with windows so that we can tap the sun's light and heat), this will save our resources for future generations. Also we should encourage the usage of solar radiation and wind in energy production since their use is of great concern at this time when the atmosphere is yearning for change.

Our industries should envision the design of a product so that at the end of a product's life, it should be the start of it being a raw material to another industry, before they finally become food to the environment (biogradable).

The way we see nature as a tool for exploitation without reciprocation has led to an over-exploitation of natural resources. We need to be humbled by nature's intelligence. We have destroyed our natural ecosystems by constructing roads which have lead to flooding since they do not allow the storm water enough time for infiltration.

Congesting industries in towns has lead to the moving of resources from one place and heaping them into another place. This resource movement has deprived/depleted certain areas the vital organic matter. Further, these waste materials from towns are dumped into our water bodies through sewage mixing which is an injustice to our environment. They recommend that we need to

stop this mixing them with the sewage and transport back these by-products to the farms where they will act as organic manure.

Bioremediation is a wonderful concept which is addressed and needs to be followed keenly. It involves the usage of plants to sequester the pesticides from our water bodies and soils, a concept which is self-sustaining and environmental friendly.

Exposing of workers in industries to dangerous chemicals and environments interferes with their health. This exposure can cause carcinogenic, teratogenic and mutagenic diseases. They find this not living sustainably, because the workers will spend most of their time and money treating these diseases than spending them in constructive production. The authors recommend that before we involve human beings in the production process, there is need to put their safety into consideration.

Aforestation and reforestation are well documented in the book cradle to cradle in order to remind humanity that trees are the powerhouses of our oxygen which we inhale, hydrological cycle, soil erosion control and wonderful ecosystems. We should also have controlled deforestation by cutting down trees wisely.

Ideas and concepts I agree with the authors are:

The sorting of biogradable and non-biogradable components so as to close the loops in the biological cycle and the chemical cycle is of great benefit to the environment. This will help in natural soil fertility and microbial maintenance. The artificial fertilizers make our soils deficient of organic matter which is food for microbes and a soil chelator.

The creation of monocultures is of great concern at the moment because it has brought about less biodiversity and genetic drift leaving us with less from which we can get our food, drugs and fiber. The introduction of new species to their unnatural habitats has wiped out other species, or brought about complexions in that ecosystem. An example is the introduction of the beetles from South Africa into Lake Victoria (Kenya) to consume water hyacinth which is a menace, these beetles have started attacking the crops around the lake.

Man is competing to destroy nature while nature is kind to him. Amid the signals (i.e. high temperatures, floods etc.) man has kept messing up with it. I agree, the rate at which we are extracting raw materials is high than we are giving nature to rebuild. As exemplified in our farming, staple crops used to be planted once a year, but now it is twice a year, the soil is not given time to replenish itself of the lost nutrients. The moment man knows fully that ecosystems depend on relationships, the better.

The coming up of industries which use the local materials to produce the same product. This will make industries move to places where resources are rather than move resources and pile them in towns, hence causing pollution.

The fascinating concept of machine washing which extracts the detergent once it has finished the laundry work is a welcome one. With this, we will avoid having detergents poured into our rivers where they kill aquatic life. We will also recover the materials used in making the detergents then channel them back to the same industries for reuse in making more detergents.

The standardization of products by all industries will help do away with the synthetic additives which are added to products to bring about differences for purposes of hoodwinking the customers. Since the additives are not friendly to our bodies and the environment, they end up causing diseases in our bodies and polluting the environment. As long as the industries maintain the quality of the product, the packaging does not matter; people do consume the food not the packaging. All the decorations in the packaging are a waste of resources which need to be preserved for future use.

The idea of telling the industrialists (employers) to consider the three aspects, (i.e. environment, economy and equity) when planning to produce any product are noble. Most employers take human life for granted by subjecting workers to harsh working conditions with no protection wear. Other industrialists discharge their effluent into rivers, soils, and even air where it ends up causing problems to human health. Equity will bring reasonable pay to workers hence the philosophy "a well paid worker will cause less environmental degradation" will be proven right.

Reclaiming the polluted places for other uses is a far-fetched concept for many industries. From many examples around us, there are many places classified as “waste” simply because the resources got exhausted. In fact if all industries considered the concept of reclamation, then we would have not had the terminology “wasted places” anymore.

I find the concept of industrial re-evolution more charming than the term industrial modification in the world of today. If we are to think of the environment and act towards improving it immediately, then embracing the industrial re-evolution idea will do. This will be either by re-designing the product to have multiple uses or become a raw material to other industries.

Few areas I disagree with the authors are:

The designing of “lotus clothes” will lead to no economic growth. These clothes will be worn continuously since they will never get dirty. Such a scenario will lead to loss of jobs, in related industries. Most developed economies are sustained by industries, so with goods or fibers which last indefinitely, then it means no economic growth.

Secondly, I don't foresee a situation where people have to inquire as to whether the materials used in making the product were procured sustainably or not. Funny enough that the builders need to ask the owner of the building whether the timber to be used among other materials were obtained through sustainable means. I find this very tricky, because people will end up not consuming anything since strictly speaking all materials used in making the products are not got through environmental friendly ways.

Where on earth can every man produce all the goods and fiber for his needs? It troubles me when I read that we need to ask whether the food or fiber was/is organically produced before buying it. Further, if it followed organic processing, and so on. In short, they are telling us that one need to grow his / her food to be sure that it is organically produced. I find this situation very difficult that everybody has to produce food and fiber for himself. If this goes on who will consume the others' goods? We will not have agricultural industries and other people who depend on the income from the agricultural surplus will have nothing for their daily needs.

If the products are not going to be preserved through the use of preservatives, then how are they going to reach those places which are disadvantaged? Other places have comparative advantage over others in terms of certain crops, so to get these crops, there must be preservation (adding life to the product) to enable it reach the far distant places. If people are to fully follow these recommendations, then there will be malnutrition in arid and semi arid areas, since foods will not reach there for consumption in whole.

About having few cars in the world, I see a big problem, because would deserve to be given the license to buy one? People will not have a clear criterion to use in selecting those who deserve to own cars or not. Since man is selfish, everybody will want to get a car. So the idea of controlling the number of cars so as to have few places for parking tarmacked I find it more utopian than a reality. Until human beings are made to think the same, then we won't have the idea come into fruition. No wonder people in the whole universe have different finger prints.

The model home where everything is around man is a novel idea but some things are not put into consideration. For example when, the writers say that man needs to stay with animals in the same house, I find it a not-well-thought idea, because they are not considering the issue of Zoonotic diseases (transmissible between animals and man).

Changed my life style

The concept of synthetic and natural foods has made me to be more careful when buying foods especially juices. I have learned the problem of synthetic chemicals which simulate the natural ones. In the market I think I will be more careful in selecting goods from the shelves. In future I will read and re-read labels before putting the product into my trolley for home consumption.

The packaging in biogradable and non-biogradable materials has also captured my attention so much, that I had to count the number of plastic bags I had my goods packaged in from Walmart the last time I went for shopping. Further I had to go through the sides of the polythene bags to see any sign of "recyclable" but unfortunately, there was nothing like that. This made me realize my contribution in trying to propagate environmental degradation. To absolve myself from

the mess, I feel that I need to change in terms of bringing fewer and fewer numbers of polythene bags into my house. I will also be in the lookout not to carry any packaging which in not having the sign of recycle. With this, I will have contributed to bring about less environmental degradation.

Aforestation and reforestation concepts have reawakened me to asking myself how many trees have I planted? Yes if I am breathing in the oxygen from the trees planted by philanthropists, then it is high time I got out and plant trees for future generations. Worse still I have not taken care of these trees, I go a head and cut them ruthlessly, what a sadist I have been? I feel for the ones I cut. The concept brought more emotions into my life and I will start treating trees as if they are human beings with emotions.

The book is an all generation book giving us a challenge to think of our environment first before bringing out any product or change into effect. It even goes ahead to give us what seems now utopian, but in the near future, I see it coming into fruition. Because of these, the book has changed my pessimistic approach that now I look forward in accelerating any of these suggested ways to help remake our universe into its original state of being pollution free.

The book has given me an insight on clothing and toys, so going to do shopping for my children and myself in terms of clothing, I will need to know the materials used in making the clothes, so that I do not buy clothes with carcinogenic/teratogenic if not mutagenic chemicals or both. What an ignorant person I have been and don't care to a point that some clothes I own keep 'firing' whenever I remove them, only to find out from the book that such firings are not good for my nervous system for they give a false impression of nerve impulses. I will go for cotton next time I go shopping.

Most products which are said to be "free" of certain chemicals, I should not buy without asking the replacement of that chemical in the manufacture, since one may find that they replaced with a dangerous one. What a poor consumer, I have been, easily convinced with cholesterol free

fats or oils. I have never asked myself what replaced the cholesterol which was there? I need to read more, for long producers and industrialists have taken me for granted.

Reference:

Cradle to Cradle: Remaking the way we make things. William McDonough & Michael Braungart. North Point Press. A Division of Farrar, Straus and Giroux 19 Union Square West, New York 10003. 2002.