

Composting as a Free Deed:

Being and Becoming

By Bruno Follador



Pictures: Courtesy Bruno Follador

Plastic flowers always struck me as being something odd. It was not only that they are not alive and are often made out of some cheap plastic. There was something more about their artificiality that intrigued me. But I could not express it in words. Not too long ago, while I was driving south on Cardinal Avenue, in Sao Paulo, Brazil, I saw the following words written on the wall of a cemetery: 'Plastic flowers don't die'. This was it! The fact that fake flowers do not die, that they are incapable of going through a death process was what I could not express in words.

Compost has always fascinated me as being something profound and of utmost importance. And not only because it can help increase agricultural yields and is a means of addressing major urban and agricultural waste challenges. I have always felt that there was something more in it that I could not express in words. I never felt composting had primarily such utilitarian goals. Reading Goethe, the great German scientist and poet, I was deeply struck by the following thought he had on Nature: *'Life is her most exquisite inven-*

tion; and death is her expert contrivance to get plenty of life'. This was it! This is what I could not express in words before. There, in the midst of decaying material -- manure, moldy hay bales, piles of unwanted weeds, garden debris, food scraps -- lies the wellspring of any farm. The compost pile is the life-bearer on any farm. A teacher of mine once told me an old saying: *'If you would like to know the health of a farm, go to their compost yard... there you will see how resilient and alive or not a farm is'.*

Tragically, it is becoming rarer and rarer to see compost piles on a farm. Soil fertility has been reduced to an input-output, cost-benefit mentality, where the soil has been degraded to being a simple means to conduct plant nutrients. It is seen only as a physical platform for the plants to *'stand upon'*. The idea of making and turning compost piles is often ridiculed as being too time consuming, *'a romantic, idealistic view that doesn't know real agriculture' or simply 'unnecessary'*.

And when compost piles are present on farms, generally, two extreme gestures predominate which can be described as a polarity.

'Attention is the rarest and purest form of generosity'

Simon Weil



TWO EXTREMES

At the one pole, the compost and the compost yard becomes and functions like a dump site where 'waste' materials are heaped together. Once enough matter is piled up, it is somewhat shaped into a bulky rectangle and covered with straw. The farmer or gardener often then completely forgets about it and will only come back to it a year later to see what has happened. Even among biodynamic practitioners this kind of relationship is common. The only difference is that the biodynamic preparations are 'inoculated' into the piles. In both cases the gesture and relationship is one of neglect and omission, filled with the hope that Nature will take its course with a little help from us and will take care of things.

What often predominates in such piles is a process of putrefaction and decay. The compost pile left to itself undergoes chance conditions of heat, moisture and the influence of microorganism which may exist under these accidental conditions. Anaerobic fermentation often arises, leading to a proliferation of unwanted microorganisms such as the denitrifier bacteria. Ehrenfried Pfeiffer succinctly described this process:

'Putrefaction is a mere "decay" which can be just a chemical disintegration of animal matter, proteins especially, or it can also be fostered by certain bacteria which thrive on the products of a partial decay. Such putrefaction is characterized, in general, by a foul odour, by producing slimy, smeary masses... Should the random decay go so far that finally salts, carbon dioxide, ammonia and free nitrogen result, then all organic matter is lost, because these end products are washed away or escape into the air.'

We meet the other pole -- opposing the lack of involvement or failure of the farmer to carry and guide a biological process -- when we see how the guidance itself becomes so overpowering that the life of the compost pile falls under the spell of total manipulation and control.

Often this type of composting is found in large industrial composting operations. The piles are monitored from beginning to end. Moisture content, C/N ratio, temperature, odour, oxygen and pathogens are all strictly kept in check. Large, self-propelled turning machines can revolve the same windrow three to five times within a week, guaranteeing aerobic conditions and accelerating the process of decomposition. Within a period of two months it is ►

possible to obtain a 'finished' compost, black in its colouring, powdery and loose in its consistency, and often very light and without much structure.

Although no putrefaction takes place, because the decomposition process was fully controlled from beginning to end, what often predominates is just a process of literally breaking down, where not necessarily any upbuilding process towards the creation of humus is introduced. The process itself is too fast and numerous beneficial microorganisms and fungal hyphae cannot properly develop or survive under the constant revolving of the windrows.

A beautiful passage from Nikos Kazantzakis's *Zorba the Greek* illustrates the consequences both for nature and for us when life process are sped up and overridden by a lack of understanding and patience.

'I remember one morning when I discovered a cocoon in the back of a tree just as a butterfly was making a hole in its case and preparing to come out. I waited awhile, but it was too long appearing and I was impatient. I bent over it and breathed on it to warm it. I warmed it as quickly as I could and the miracle began to happen before my eyes, faster than life. The case opened; the butterfly started slowly crawling out, and I shall never forget my horror when I saw how its wings were folded back and crumpled; the wretched butterfly tried with its whole trembling body to unfold them. Bending over it, I tried to help it with my breath, in vain. It needed to be hatched out patiently and the unfolding of the wings should be a gradual process in the sun. Now it was too late. My breath had forced the butterfly to appear all crumpled, before its time. It struggled desperately and, a few seconds later, died in the palm of my hand.'

To force our will power onto Nature, thinking that we can speed things up or 'fix' any problem with our ingenious technology -- through genetically modified seeds, pesticides and better machinery -- can bring, and already has brought, disastrous social and ecological consequences. But to try to extract ourselves from Nature, thinking that our participation is unwanted, not needed, or that we are incapable of contributing to the whole, especially when working in the realm of agriculture, can also have calamitous consequences.

A compost pile unattended can lead to the production of poisonous substances such as ptomaines, mercaptans and hydrogen sulphide. The water runoff and leachate from such piles can pollute and contaminate surface and groundwater. At the same time, if the composting process is forcefully driven by a mechanical approach, based on manipulation and control, life processes will be disrupted or destroyed, and we will be only left with an efficient way of decomposing organic matter. In this case, the art of composting is reduced to 'waste management'.

Bernard Lievegoed once wrote that: *'The compost heap is like a caterpillar in a chrysalis state, it's the same chaos... as the butterfly comes to manifestation out of the chrysalis, so the plant out of the compost.'* That happens when mature compost is brought into the fields and placed at the disposal of the seed.

How could we begin to see the compost pile as this great place of transformation and metamorphosis? And how could we develop a different kind of relationship with the composting process, where we won't succumb to either pole, where the decomposition of organic matter can be led

through a recomposition, towards a harmonious composition -- where the finished compost can actually nourish the Earth, fostering the resilience and health of the whole farm?

I will discuss the technical and practical details of how to mix, build, turn the compost pile, and most importantly, how to understand and access the different qualities of the organic matter and the compost pile itself, in a future paper. For now, my intention is to stimulate a different way of seeing and relating to compost.

CONVERSING WITH THE COMPOST PILE

Rudolf Steiner, already in 1924, approached this need for a renewed relationship when he gave his course on the Spiritual Foundations for the Renewal of Agriculture. He spoke about the need to establish a personal relationship to everything in farming 'especially to the various manures, to the methods of working with them. This may seem unpleasant, but without this personal relationship, it really won't work.'

For the farmer and gardener to understand and develop a personal relationship, a whole new commitment to agriculture, composting and life process is demanded. To work with compost is to humbly accept an invitation to rethink our relationship with the Earth and ourselves while actively engaging in a process of composition.

The old saying that we come to know the health of a farm through its compost yard gains new meaning and depth when we begin to understand composting as being an activity that goes beyond utilitarian purposes of yields and waste management. It means to start seeing the compost pile as an outer expression of our way of thinking and relating to Nature. The pile begins to show itself as the outer expression of the inner gesture of the gardener or farmer.

To compost means to bring things together -- from the Latin composites, 'placed together'. It means to compose something out of decaying material, to orchestrate all these different organic substance into a living whole, creating life conditions where different micro-organisms, numerous creatures and beings can unfold. But this requires the constant attention, care and personal relationship of the gardener and farmer to this whole process. Pfeiffer wrote that the 'secret' of compost methods is:

'to introduce such conditions of life that no final decay or putrefaction can occur, but that the micro life of the soil resumes its activity, bringing about a complicated yet stable structure of organic matter. Humus is not so much a definite chemical formula but rather a state of existence of transformed organic matter in connection with soil, soil life, moisture and air. It is a balanced state of matter, almost a living organism or condition itself.'

It is the farmer or gardener who introduces these life conditions; it is he or she who carries the responsibility to make the right judgment of how best to mix the material, what material to use, where to locate the pile and when to interrupt and when to begin a new process. It is this sense that to work with compost is to humbly accept an invitation to rethink our relationship with the Earth while actively engaging in a specific process of composition and creation. It is an astonishing process to participate in, and something to marvel and witness as decaying material can turn -- chrysalis-like -- into humus, a new life-giving substance.

To make compost is to be in a constant open conversation with our garden or farm. There is absolutely no single



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recipe, no absolute formula. There are indeed certain principles in terms of temperature, moisture, oxygen content, C/N ratio, and turning cycles that need all to be considered. But each single farm is imbedded in its own micro-climate, in its own farmscape, with its own individual population of plants, animals and people. Ultimately, each farm is its own living being, on its way to becoming a being, always unfolding, always in process. So each farm has different needs and the farmer should be sensitive to this whole context, and subtle nuances as he or she is making a compost pile.

It was only when I began to work intensively with composting that I begin to understand the following words by Ehrenfried Pfeiffer: 'The human being who guides and directs the beginning, the course and the end of natural growth process, is the strongest force in Nature. His capacity is the final decisive factor.'

The compost pile can be a great school and a sacred laboratory of deep inner and outer transformation. It's a place where we can practice and work at the development of the capacities and responsibility that Pfeiffer has mentioned.

Composting should be seen as activity springing out of a free deed, out of love for the Earth and Humanity.

The decisive factor is how the farmer is relating to this whole process – this personal relationship will require nothing less than his own continuing metamorphosis and transformation. Humus and humanity have the same etymological root – in order to create humus in the compost pile we must also be willing to create our own inner humus which can be understood in the light of Goethe's Poem, 'The Holy Longing': ■

*'Tell a wise person, or else keep silent,
because the mass man will mock it right away.
I praise what is truly alive,
what longs to be burned to death.*

*In the calm water of the love-nights,
where you were begotten, where you have begotten,
a strange feeling comes over you,
when you see the silent candle burning.*

*Now you are no longer caught in the obsession with darkness,
and a desire for higher love-making sweeps you upward.*

*Distance does not make you falter.
Now, arriving in magic, flying,
and finally, insane for the light,
you are the butterfly and you are gone.*

*And so long as you haven't experienced this: to die and so to grow,
you are only a troubled guest on the dark earth.'*