A Closer Look at Biodynamics

1. Why this article?

For a long time I reserved my thoughts on the subject for private conversations. I didn't want, and still don't want, to appear to be crusading against an approach that seems to be so successful for so many excellent colleagues and often friends. But today, in the eyes of a large part of the amateur and professional wine world, there are only two categories of winegrowers: biodynamists and poisoners, or, to put it kindly, winegrowers with no environmental conscience and no sensitivity to nature. Now, I can easily show that I do not belong to the second category, but I have to explain why I am not attracted to the first. And that requires getting to the heart of the matter.

2. Is ploughing biodynamic?

- What was the big change with biodynamics?
- Well, I pay more attention to my vines, I observe them, I look for signs of imbalance or the expression of harmony. I listen to them and talk to them.
- OK, then. What have you changed in your vineyard work?
- I plough the soil, I take more care with pruning, I've stopped using poisons : weedkillers, insecticides, systemic fungicides.
- So it's just like organic farming? Is that enough?
- No, I also use biodynamic preparations.
- So you don't need to spray your vines any more?
- Yes, I have to use sulphur against oidium and copper against mildew.
- Like everyone else, then?

For many winegrowers, their commitment to biodynamic viticulture stops there. Others go further, constantly experimenting with new methods of vineyard management, trying out natural products for the health of the vines, looking for associations with plants, trees, even farm animals and any other means of encouraging the biological richness of the vineyard. But is this specifically biodynamic?

At this stage, it is hard to see what could be criticised. It is an approach to winegrowing that is clean, respectful and meticulous. A form of organic cultivation supplemented by nice homeopathic herbal teas that will not cause any harm, plus a couple of strange magical preparations. And those who practice it are eager to claim that it works.

I am certainly not trying to divert them from their path. But it is clear that biodynamics is in fact only marginally present in their practice. The technical approach is basically organic, complemented with some mysterious spraying and, occasionally, some elements of an esoteric conversation. Most practices are only part of a responsible, sensitive, attentive and often innovative approach that is not the property of any particular school. And yet the word biodynamic is flung around like a banner, even though few winegrowers have the curiosity (and courage) to try and understand its roots.

I do not poison anyone either, and I too have vines that are doing better and better, soils that are alive and wines that express their terroir with consistency.

But as soon as the biodynamic movement appeared in Burgundy, in Anne-Claude Leflaive's early years, I wanted to understand what it was all about and I noticed a number of misunderstandings.

3. An ancestral farmer's wisdom?

Biodynamic agriculture is neither peasant nor ancestral.

Biodynamics is a pure invention of the twentieth century, dating back to June 1924 to be precise, and later complemented by disciples. It is not even a late formalization of traditional farming practices. Cow's horns, dynamisation and homeopathic dilutions were among the tools of sorcerers and alchemists, but not of farmers. The most vivid element borrowed from farming tradition is probably the observation of the movements of the moon to determine the time of sowing but, strangely, Steiner (unlike Maria Thun) accords it only secondary importance.¹

Biodynamics is not farmer's wisdom. It's the theory of a scholar, familiar with 30 centuries of esoteric and mystical thought, from Egyptian mythology to theosophical occultism, including Christian mystics, alchemists, the Kabbalah and Hindu Brahmanism.

There's really nothing peasant about all this.

4. Rudolf Steiner, the inconvenient visionary

Few winegrowers like to talk much about Rudolf Steiner. Understandably so. Steiner's published work is massive: tens of thousands of pages, mostly obscure, tedious and confused. Moreover, it reeks of heresy. Practitioners of biodynamics have no desire to corroborate their findings, and often prefer to say that they do not need Steiner to practice biodynamics.

But there are two reasons why this pirouette requires more scrutiny:

The first is that Demeter certification puts the reference to Steiner at the top of its specifications². This is clear: anything done without reference to Steiner is not biodynamic.

The second is that, in practice, biodynamic practices only make sense in relation to Steiner. Why a cow's horn rather than a horse's hoof? Only Steiner knows the answer.

Biodynamics is a spirituality, not an agronomy. You cannot be interested in biodynamics without consideration to Steiner and anthroposophy, and you cannot practise it sincerely without taking them on board.

p. 2 Frédéric Mugnier

.

¹ "Nature is not so cruel as to punish man for this small lack of consideration (...) If it happens [that we have sown at the wrong time] it will simply wait in the ground until the next full moon". Rudolf Steiner Cours aux Agriculteurs, 1924. (ed. Novalis p.160) (FR).

² "The movement draws its inspiration and strength from the heart of Rudolf Steiner's anthroposophy. This includes the Agriculture Course, and his holistic understanding of healthy personal and societal development, transmitted through education, dialogue and information". Cahier des charges Demeter – édition avril 2020 p.9 (FR)

5. Where does Steiner's knowledge come from?

This is the first question we ask of any adviser or expert. So how did Steiner discover the methods he recommends?

Definitely, not through practice or experimentation. Steiner never held a spade or dug up a carrot in his life. The first and last time he took an interest in agriculture was a few months before his death, when he finally yielded to the insistence of a group of anthroposophical aristocrats and landowners and held a series of lectures for them, the shorthand notes of which were published as the 'Agriculture Course'.

Steiner makes it clear in his notice to the reader that, in spite of its title, this is not a course in agriculture: 'Nowhere is anything said that is not solely the result of Anthroposophy, which is in the process of being built up'. The practices described are intuitions that are inspired solely by his global vision of the world and have to be validated in the field.³

Beyond his views on agriculture, Steiner had an original and strangely precise knowledge of the world. Just to give you an idea: the first civilization, on an Earth that had not yet solidified, was called Lemuria, in which humans had the form of a thinking vapor capable of communicating telepathically and moving loads by their mental power⁴. Next came Atlantis, which was submerged by Nature as punishment for the arrogant and materialistic folly of the Atlanteans, corrupted by the fallen archangel Ahriman. Then followed seven epochs of 2160 years each, the fifth of which began in 1413 and will end in the year 3573⁵. And there are hundreds of pages of it, but where does he get all this from?

He says it in his autobiography: 'It was still by thought that I had arrived at these ideas; later I rose to the level of imaginative contemplation. Only then could I understand ⁶. What we understand is that his knowledge of the world of Lemurians is the fruit of his imaginative contemplation. Further writings speak of his « inner mystical experience ».

But this is not his only source. His first encounter with the dead was before the age of seven, when a woman he didn't know appeared from nowhere and called out for his help before vanishing. He soon discovered that the woman was a relative of his father who had just committed suicide⁷. Later: 'The years 1901 to 1907/08 were those in which my soul underwent impressions from the facts and entities of the spirit world. From the experience of the world of the spirit in general came particular knowledge's. Let me rephrase: his 'particular knowledge' comes from encounters with what we call spirits.

-

p. 3 Frédéric Mugnier

³ 'Here [at the Goethaneum] will be worked out the principles according to which the following tests are to be carried out, in order to really experiment with what has been given during the course in the form of practical indications' (Rudolf Steiner. Cours aux Agriculteurs, 1924. ed. Novalis p.21) (FR).

⁴ Reminds you of anything? Master Yoda, in Star Wars, whose scenario largely inspired by anthroposophy was.

⁵ Gary Lachman, *Rudolf Steiner, Une biographie* ed. Actes Sud, p.150 (FR).

⁶ "Darwinism seemed to me to be a way of thinking that led to that of Goethe, but was nonetheless set back from it. It was still through thought that I had arrived at these ideas; later I rose to the level of imaginative contemplation. Only then was I able to understand that in very ancient times, spiritual reality was animated by an essence very different from that of the most elementary organisms". (Rudolf Steiner, Autobiographie vol 2, 1925, p.172) (FR).

⁷ Gary Lachman, Rudolf Steiner, une biographie ed. Actes Sud, 2009 p.35 (FR).

⁸ Rudolf Steiner, *Autobiographie* vol. 2 p.202 (FR).

There is one point on which occultists and scientists can easily agree: it is that a large part of the world is invisible to us. It is therefore absolutely legitimate for everyone to imagine it according to their knowledge, intuition and sensitivity. But even if it is more picturesque and more detailed, why should Steiner's vision be any more 'true' than mine or yours?

6. The elemental beings.

The Demeter specifications for biodynamic certification contain a very unusual requirement: beyond the humanist and spiritual intentions of principle, and the organic-like rules listing the prohibited products, it imposes an obligation to apply two preparations to the crops each year: a '500' and a '501'9.

This is bizarre. We understand the use of treatments to correct an imbalance or cure a disease, but why would a perfectly healthy vine need to be treated with these preparations every year? To be better than well? What does that mean? Because these preparations provide it with something that it cannot find on its own? Would the primeval forest be more beautiful and richer if it were given a 500 and a 501 every year? That would mean that nature was very poorly designed and couldn't do without man. Hard to accept.

All religions require the faithful to show signs of their submission and acceptance of divine mysteries. But there is something else.

You don't have to believe in spirits to be convinced that plants and all living things are dependent on the forces of the cosmos. As farmers, we would be happy to control them, even if only a little. But even through biodynamics, man cannot act directly on these forces. Unless, like lobbyists in Brussels, we approach higher beings who are capable of influence and mediation. These beings 'exist'. Steiner calls them 'the very useful elemental beings': gnomes, undines, sylphs and salamanders, respectively active on the four elements: earth, water, air and fire. Nicolas Joly explains that the biodynamic preparations are in fact a means of 'courting' these elemental beings¹⁰.

So we misunderstood. Preparations are not vitamins. They are offerings to the deities¹¹.

7. Is biodynamics ecological?

Steiner's anthroposophical doctrine originated with the Theosophical Society, founded in 1875 to (among other things) 'remind the world of the principle of human brotherhood and to combat materialism' 12. In this vein, Steiner speaks against materialism,

p. 4 Frédéric Mugnier

⁹ "Horn dung or prepared horn dung (500P) must be sprayed at the start of the vegetative phase or after harvesting the crop, and in any case at least once a year. Horn silica must be sprayed according to the development of the plant, and at least once a year" Cahier des charges Demeter – édition avril 2020 p.107 (FR)

¹⁰ "The depth and subtlety of a taste is their work, and for that you have to be able to woo them (...). How can we talk about forces without understanding those who bring them about, by which I mean elemental beings?" Nicolas Joly, preface to: Ernst Hageman, Fondements spirituels de la biodynamie d'après Rudolf Steiner, 2017 (éditions Libre & Solidaire) (FR). (Thanks to Patrick Baudouin for pointing out this important reference).

¹¹ This explains why, unlike sulphur and copper, there is no need to spray the preparations carefully on the vines, making sure to touch every vine and every organ. As with holy water, intention suffices.

¹² Helena P. Blavatsky.

mechanization and science, and in favor of a return to spiritual values. This resonates in our time and, for some, makes Steiner, or at least biodynamics, modern and attractive.

Steiner speaks to us when he violently criticizes the industrialization of agriculture and the reduction of living processes to their biochemical mechanisms, when he observes and respects plants and animals, when he strives to understand natural forces, when he favors gentle actions. In this respect, he seems to be ahead of his time.

But this is a radical misunderstanding. Our vision of nature is the exact opposite of Steiner's. For him, man precedes nature: 'Man as a spiritual being is prior to all other living beings (...) Man is a macrocosmic being carrying within him the totality of the terrestrial world; he has become a microcosm by eliminating everything else'13. According to his biographer Gary Lachmann: 'For Steiner, the universe of matter, which seems so indisputably tangible to us, is in fact a product of consciousness, or spirit, the ultimate reality. At an earlier stage, matter did not exist. It will no longer exist in the future 14."

So, man already existed before nature, and will continue to exist after it. Nature is his provisional creation, made for his own use. Could there be any concept more opposed to our modern ecological conviction, according to which we see man as the last fruit of nature, entirely dependent on it and owing it respect and protection?

If we are lead to accept that in biodynamic viticulture man is at the center of everything and contains everything, we can see (a little) better the logic of certain bizarre practices which presuppose that plants are sensitive to elements that only make sense to humans: the 'illegitimate' status of planets invisible to the naked eye, the particular behavior of certain homeopathic preparations depending on the Kabbalistic value of the decimal number of their dilution, the particular properties of certain measurements in the metric system, the prohibitions on certain dates in the Christian calendar...¹⁵

8. Should we trust appearances?

I like the story¹⁶ of a young artist who goes to see a Chinese master: 'You want to learn to paint? First learn to look. Sit here, look at this tree, I'll be right back'. And a year later, the master comes back... Learning to look - what wonderful advice for any farmer, doctor or anyone interested in living things. Observation is often neglected. But are the eyes enough?

Goethe, Steiner's spiritual master, liked to describe himself as 'Augenmensch' (man of the eye). So much so that, reading his travel notes on discovering Naples, 'it is striking to what extent the poet seems convinced that the sense of sight alone will enable him to gain knowledge of a foreign landscape and culture'17.

p. 5 Frédéric Mugnier

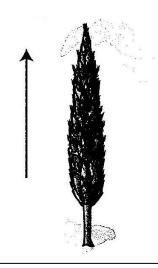
¹³ "Man, as a spiritual being, predates all other living beings; in order to assume his present physical configuration, he had to detach himself from a cosmic being that contained him and all the other organisms. On the contrary, he has rejected and discarded all these forms in order to attain his physical configuration, which is the very image of his spiritual being. Man is a macrocosmic being who carries within him the totality of the terrestrial world; he has become a microcosm by eliminating everything else" (Rudolf Steiner, Autobiographie, vol. 2, p. 172) (FR).

¹⁴ Gary Lachman, *Rudolf Steiner, une biographie, 2009.* p.151 (FR).

¹⁵ See: Maria et Matthias Thun, calendrier des semis (FR).

¹⁶ Fabienne Verdier, *Passagère du silence, dix ans d'initiation en Chine*, Paris, Albin Michel (FR).

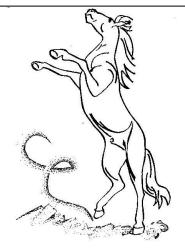
¹⁷ "It is striking how convinced the poet seems to be that the sense of sight alone will enable him to gain knowledge of a foreign landscape and culture. When he tries to familiarise himself with the economy of the Neapolitan people, he relies essentially on observation, ordering the confusion of characters in the street according to their appearance and deeming this operation easier than

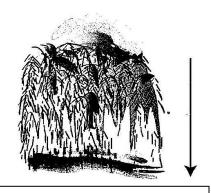


Cypress strong solar attraction, appollinian plant type

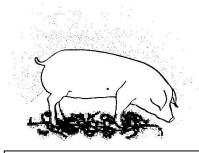
Prancing horse pulled by the forces of heat.

Dominant: forces of fruit and taste





Weeping willow.
The ascent cannot be made,
gravity prevails



Pig. Dominant: earth forces, gravity. Feeds on underground roots. Its forces go to the roots.

Drawings and captions from: "Le vin, la vigne, la biodynamie" (Nicolas Joly)

p. 6 Frédéric Mugnier

elsewhere because of their simplicity. No dialogue with a native is reported (with the exception of his noble acquaintances). When Goethe was interested in the local cuisine, he undertook a detailed enumeration of the food on offer in the markets; he described their appearance and above all their presentation, which he judged to be pleasing to the eye everywhere, but he seems not to have tasted anything or breathed in the smells". Tobias Haberkorn, Feeling Neapolitan: seeing, living and writing the city with Goethe, Sartre, Malaparte and Saviano. https://doi.org/10.7202/1026636ar (FR)

Unsurprisingly, biodynamics (and anthroposophy more broadly) is also based above all on the eye. Shapes and colors are the direct expression of the astral forces that constitute the very identity of every living being¹⁸. As such, they cannot lie.

However, is it really necessary to demonstrate that the visible external form does not tell the whole truth and can even be radically misleading?

It's plain to see, the earth is obviously flat. If it were round, the horizon would be curved and people in the distance wouldn't be able to stand. Erasthotene (276 BC to 194 BC) found another way of looking at this question, an indirect, abstract, technological, mathematical way, by having the shadow of a stick measured on the same day in Aswan and Alexandria to deduce by trigonometry the measure of the earth's radius. Was he a horrible, insensitive, narrow-minded scientist? But wasn't he closer to the truth than someone who simply looked at the horizon, no matter how intensely?

Looking only with the eyes will not suffice. Understanding nature demands questioning it through every possible way.

The idea that the outward appearance of beings reflects their innermost quality is irresistibly convincing and difficult to challenge. But is it true? In any case it is an irresistible means of manipulation.

Used without restraint, it contributed to the victory of the seductive John Kennedy over the tenebrous Richard Nixon in 1960. One is blond and radiant, the other dark and tormented. Is this relevant when choosing a president? In any case, the campaign proved effective.



¹⁸ [The animal organism] lives in such a way that in terms of its configuration of form and color, but also in terms of its structure and the consistency of its substance from front to back, so from the snout towards the heart, it has the actions of Saturn, Jupiter and Mars, in the heart, the actions of the Sun, and behind the heart, towards the tail, the actions of Venus, Mercury and the Moon. (...) This development of knowledge according to form, according to the contemplation of form, is of immense importance (...) You thus have the possibility, now from the configuration of the animal, of finding a relationship between what the animal provides as manure, for example, and the needs of the earth whose plants the animal eats". (Rudolf Steiner, Cours aux Agriculteurs, 1924 ed. Novalis p.68-70).

p. 7 Frédéric Mugnier

_

(Rather than taking an example from the United States in 1960, I could have referred to images used in Europe twenty or thirty years earlier. But for the moment I prefer to stop short of invoking Godwin's Law.)

9. Does eating asparagus make you grow taller?

We may not be convinced of the influence of the stars, but we may share the idea that the shape of plants or animals is inscribed in each of their parts, in the substance of each of their cells, and that it expresses their character and profound qualities.

The problem is that Steiner presents as self-evident, without attempting to prove it, the fact that, since the matter of a cypress tree or a horse must contain a principle of ascendancy and that of a pig or a willow a principle of gravity, these principles can be extracted from them in manures or herbal teas prepared by the appropriate method, and that these preparations will confer on the treated soil or plants the qualities of the horse, pig, willow or cypress. But nothing on the surface of this argument appears obvious.

To say that cypress contains an elongation factor is a tautology. We could as well say that it contains a cypress principle. The question is: can this elongation principle be extracted and dissociated from the cypress principle? A cypress bud can be used to grow another cypress tree. But can this bud be used to elongate a willow tree without turning it into a cypress?

If that were the case, we would grow taller when we eat asparagus, we would jump higher if we ate horse, we would become pigs when we eat pork. Who has observed this?

10. The vertical organization of the world.

The modern reader, with a tendency towards ecology, who reads Steiner's writings or those of his friends such as Nicolas Joly or Gary Lachman, regularly comes across qualifiers that introduce a hierarchy of value between the different forces of nature and the different living beings:

- Light is exteriorized by the flower, whose finesse, color and expression manifest this third state of matter, which is more fragile but also more respectable' 19.
- The autonomy of the animal is the sign of a superior kingdom' and
- Above these three kingdoms, there is man, who stands erect²⁰.

Everything that is lower, material, disorderly, dependent, obscure or cold belongs to a lower category. What is above, spiritual, ordered, autonomous, luminous or warm, is inherently superior and more respectable.

This idea is offensive today because we know that nature is a whole in which the most common bacteria conceals an unfathomable complexity and plays a role in a living system in which each being depends on all the others. We discover new biological interactions every day. A watch works when all its cogs are in place. Will we say that some are more respectable than others?

p. 8

¹⁹ Nicolas Joly, *Le vin du ciel à la terre,* p.29.

²⁰ Idem, p. 46

11. The 'clairvoyant' who saw nothing

Applied to human groups, the hierarchy of values becomes terribly problematic. To put it very carefully, it cannot be denied that Steiner opened the door wide to openly racist interpretations ²¹. Of course, people will say that he was simply reflecting the prejudices of his time, but that is precisely the problem! Steiner was only cultivating the prejudices of his milieu, while believing himself to be inspired by superior beings.

The place and date of the Agriculture Course (June 1924 in Silesia) are not irrelevant. In 1923/1924, Germany was in the throes of a hyperinflation that shattered all points of reference and all values²². On 8 November 1923, the failed Munich brewery putsch took place, from which Hitler drew lessons for his strategy to seize power.

Steiner, the author of 'The Philosophy of Freedom', the 'clairvoyant' as he liked to call himself, went through this period without seeing or saying anything. He, who so easily dealt with supernatural beings, did not see the 'foul beast'²³ approaching, who fed in part on his lectures and writings.

In certain circumstances, a lack of lucidity is not a weakness, it's a fault, or worse.

12. Time to choose.

What can we learn from all this? Most biodynamic winegrowers could not care less about Steiner and stopped reading at paragraph 3.

Apart from two or three homeopathic preparations, there is often very little biodynamics in their practices. They delegate mediation with the forces of the cosmos to their advisors, practice sensitive and frequently innovative viticulture, do not pollute and often make wonderful wines. It's all perfect.

But if they don't care about Steiner, it means they could do without him. So why claim to be biodynamic if they don't really believe in it? After all, if they are only doing it out of pragmatism, because 'it works', there's nothing to stop them from continuing to put manure in cows' horns, in the same way that people reproduce, out of tenderness or

²³ "The belly is still fertile from which the foul beast sprang" .Bertolt Brecht The resistible rise of Arturo Ui

p. 9 Frédéric Mugnier

²¹ - Humanity has risen by rejecting the lower forms in order to purify itself, and it will rise even higher by separating one kingdom of nature, the kingdom of the evil race". R. Steiner, Les races du mal, 1907 (FR).

⁻ It is often felt to be an injustice of nature that it condemns one to exist in an inferior human race and elevates the other to an apparently accomplished race". R. Steiner Les Concepts fondamentaux de la Théosophie », 1905 (FR)

⁻ To begin with, let us look at the black African human. His peculiarity is that he sucks in the light and heat of cosmic space. He absorbs it (aufnehmen). This heat and light cannot pass through the whole of his body, as the human being remains a human being, even if he is black' R. Steiner, Conference in Dornach, 3 March 1923.

⁻ If you could look into the past, you would see that in Lemurian times, the body had the appearance of a gigantic, clumsy form (...). You can still find echoes of this in the American Indian population". R. Steiner Les Concepts fondamentaux de la Théosophie », 1905 p.146.

⁻ Etc., etc., etc... I dare not quote the most shocking (FM)

²² "No people in the world (...) has ever known the delirious and grotesque exaggeration of all these phenomena at once, such as took place in Germany in 1923. No one has experienced the gigantic, carnivalesque dances of death, the endless, extravagant saturnalia in which all values, not just money, were devalued. Germany emerged from 1923 ripe not precisely for Nazism, but for any number of outlandish adventures. The psychological and political roots of Nazism run much deeper (...). But it owes to that crazy year what makes up its current [around 1940] insanity: its icy delirium, its blind, overweening and unbridled determination to achieve the impossible, proclaiming 'What is right is what is useful'". Sebastian Haffner History of a German, reminiscences 1923-1933.

superstition, a grandmother's trick to stop milk going sour or champagne losing its bubbles.

But if we believe that biodynamic viticulture makes sense, then we have to accept the whole heritage. We must recognize that the organization of the world as Steiner saw it, strange as it may be, represents a reality of a higher truth than any other. And therefore Steiner asks us to submit to a revealed, rigid system, inaccessible to criticism, personal judgement or the idea of progress, over which reasoning and experimentation have no relevance, and whose interpretation, in practice, is the privilege of the adviser.

In my opinion, this is a serious renunciation, an abandonment of freedom. Anthroposophy is religious, even supra-religious in nature. It claims to be a universal explanation of the world. No field, material, spiritual or moral, escapes it. Do we really want to throw ourselves into it?

If you are not comfortable in the anthroposophical church, you should not call yourself a biodynamist.

13. So much for that.

I wanted to show that one can be reluctant to biodynamics without being indifferent, ignorant or insensitive. I have corrected some commonly accepted misconceptions and pointed out that the ideological underpinning of biodynamics is not indifferent.

Regarding my practice, I will continue to decide one day at a time, according to my own intuitions rather than those of a master, nourished by my observations, my interactions, and more generally by a conception of the world born of my experience and my culture. Technical knowledge and science play a small role in this, as much and no more than they should.

Science is now often misunderstood and disliked, partly because of its association with destructive industrial approaches. But it has one great virtue compared with beliefs, and that is that it is by nature and method open to criticism and in constant reconstruction. It knows the extent of its ignorance and does not claim to define the Truth.

Chambolle-Musigny, September 30, 2022

Frédéric Mugnier

(Thanks to Douglas Danielak for the translation. July 2024)

p. 10 Frédéric Mugnier