Albert de Vries

A methodology for practice-oriented research

HUMAN-INCLUSIVE AGRICULTURE

Developed based on experiences
in biodynamic agriculture

GreenSouth

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Foreword

It is both a privilege and a pleasure to support this publication by Albert de Vries with a foreword. It appears in the context of the GreenSouth project and touches on a central point of our shared concern: how can research emerge that not only involves people, but **originates from them** – from their practices, their responsibilities, their desire for development?

In the GreenSouth project, we are currently preparing an educational programme for biodynamic and organic farming in South Africa, Zimbabwe and Mozambique. The aim is to create training and further education opportunities that are locally relevant and empower people in their professional lives. The concrete development of appropriate training modules is still pending. But one thing is already clear: technical knowledge alone is not enough. What is needed is a methodology that helps us to truly understand the **learning and development needs** of the farmers, trainers and trainees involved – from their own perspective, in their concrete practice, in their cultural and individual reality.

The methodology presented by Albert de Vries in this paper is a key resource for us in this regard. His idea of *human-inclusive research* focuses on people's **individual acting impulse**: not as a mere starting point, but as a dynamic force from which learning processes emerge – both individually and collectively. *Perceiving while empathising* and *aligning while empathising* are not just methodological terms. They describe an attitude with which people relate to their practice, their environment and each other – an attitude that is educational in the best sense of the word.

We intend to actively pursue this approach in our planned collaboration with our partner organisations in southern Africa. We see it as a promising way to shape training and research that is **not imposed from the top down**, but developed **together with the people** – in dialogue, based on experience and on an equal footing. This also involves understanding the diversity of regional contexts not as a challenge, but as a resource. It is precisely by consciously building on individual acting impulses that collective learning can emerge, supported by genuine participation and mutual inspiration.

In this publication, Albert de Vries draws on decades of experience as a researcher, facilitator and methodological innovator. He combines depth with clarity, theory with practice, attitude with tools. What he describes is not a recipe – but an invitation to think, feel and shape the future together. This publication provides valuable guidance for our future work at GreenSouth.
I hope it will find many attentive readers, especially among those working in agricultural education, consulting and development. May it inspire and encourage them to break new ground – based on practical experience, together with people, for a vibrant and inclusive agriculture.

Klaus Merckens
Project Coordinator, GreenSouth
Ulm, Germany, July 2025

1. Introduction and conclusions

In the context of exploring the possibility of a research group and practorate in organic or biodynamic agriculture at Aeres Agricultural University of Applied Sciences, a suitable programme is being sought, which is the reason for this memorandum.

When we look at biodynamic agriculture, we see that it is characterised by the wide variety of farms, each of which is unique. This is not a 'mistake', but rather an ideal, where the concept of 'farm individuality', which is central to biodynamic agriculture, provides inspiration. How can a research programme honour the principle of further increasing the diversity of the farms? How can a research programme do justice to the farmer and his or her practice? These goals can only be achieved if the research programme starts and ends with individual farmers. Such a research programme is not only about increasing diversity in nature, but also that of farms. The aims of biodynamic agriculture therefore require research programmes to be designed in ways that avoid standardisation and support diversity and individuality.

To avoid standardisation, we must work from the ideal of diversity when drawing up the research programme and farmers must be involved in the research from the start. You can't achieve this by making an inventory of farmers' research questions by means of surveys. Let's consider what happens when you have two groups of dairy farmers talking about their most important questions. The presidents of these groups then meet with other group presidents to decide on the most important questions on that level and in this process of funnelling, the questions become abstracted. This would result in a programme with studies that are disconnected from practice [1]. The outcome of such a procedure, would be a generalisation, that the stakeholders experience as a valid truth with no room for diversity. Through abstraction the connection with the initiating and inquisitive person disappears and ultimately there is less and less room for people in the proposed answers and solutions.

Such a procedure for arriving at a research proposal is based on the idea that scientific research is used to discover how best to shape practice. What you then see is that farmers want to achieve the same good results as in the research and set up their farms in the same way creating uniform factory farming. Farms become enlarged laboratories, as it were, with conditioned conditions and a controllable input.
Suppose we turn it around: We want to connect with the practice of farming and start from the premise that science clarifies and makes transferable what professionals develop in practice, and from there arrive at a research programme?

The **first** part of the research programme is visiting farmers. The researcher looks at the farm to see where research is already taking place and determines what contribution he/she can make to clarifying that practice. While observing, it will become clear that the professional works in his practice in a situational or intuitive way. If you want to clarify this practice, it is therefore important to provide concrete examples that can be shared with others, instead of generalising.
We have already mentioned the **second** part. Researcher and farmer look at where developmental questions lie and how they can be answered. This leads to the development of a research design.
Since farms are naturally part of a network, the **third** part of the research programme consists of involving this entire network in the process. Research is then focused on how a civil servant, a politician, an agricultural researcher, a trader, a banker, and so on, organises his or her practice in such a way that there is room for the professional development of a farmer and his or her farm. It is always about putting people first instead of a general idea. This means a plea for a radical bottom-up approach to research.
Here we can connect with professionals who already have an ideal in this direction. The ideal does not have to be articulated in terms of 'professional development of a farmer and his or her farm'. It may be wanting to contribute to sustainability or to bring more humanity into working relationships.

To be effective the researcher or research supervisor must have specific skills, such as those used in researching their own practice, namely intuitive action and ‘empathetic perceiving’. The methodology constitutes the **fourth** part of the research programme and on this level a certain degree of generalisation is justified.
A **fifth** part is regularly reporting on all these activities so that other professionals can be inspired and share their research and development questions.

Some conclusions:

1. To promote a human-inclusive agriculture, you have to start with the professional and place and keep them at the centre of the research.
2. This requires a radical bottom-up approach in the entire network in and around the agricultural professional.
3. The professional already conducts development research on his own. In that research, there is room and attention for the parallel development of both practice and professional. This development research can be supported and made explicit from a facilitating network.
4. Professionals are working in that network who can also be facilitated in their research in their practice.
5. The skills associated with an investigation of one's own practice must be made explicit and more widely accessible.
6. A research programme that supports human-inclusive agriculture has a clear agricultural, sociological and methodological content.
7. With the practice-oriented methodology 'perceiving while empathising’ and ‘aligning while empathising’, it is possible to connect in a targeted way with the specificity of each practical situation. With this commitment, that practice can be further developed and the professional working in that practice develops himself at the same time.

2. Practice-oriented research

2.1 Practice and science

The title of this study refers to 'practice-oriented research'. This concept covers many forms of research, for example:

- a trial field on a farm, where the farmer fulfils the role of trial field employee,
- an experimental farm, managed by researchers with experiments carried out under practical conditions, i.e. on the scale of ordinary farms,
- measurements carried out on farms by researchers,
- farmer surveys,

In all these forms of practice-oriented research, it is assumed that science will reveal how best to shape practice [2].

Can there be a way where science clarifies and makes transferable what professionals develop in practice? With this way R&D becomes Development & Research instead of Research & Development and Practice-oriented research involves a farmer doing his or her own research on his or her farm.

Just like everyone else, who is connected and responsible in his/her work, a farmer develops his/her farm operations while trying out and investigating. However, farmers, like other people, often also have the idea of practice-oriented research taking one of the four forms listed above. For outsiders and for the farmer himself/herself, it is not self-evident that they are already investigating. I encountered this dilemma at the beginning of my career as a research supervisor:

Example 1

The research becomes visible in the field
Albert de Vries, Haus Bollheim [3]

Haus Bollheim is a biodynamic farm of 127 ha near Euskirchen, started in October 1982. Before the takeover, it was a common farm. The co-workers wanted to do their own research since biodynamic agriculture is not a ready-made method and is therefore con-stant-ly being developed through peoples' experience, feelings and ideas.

I had been doing research on biodynamic agriculture for a number of years and was finding it difficult to establish a connection between research and practice. I talked to the people at Haus Bollheim and the idea emerged to guide them in the research they were carrying

out in their work. However, they asked me which topic within the biodynamic movement would be important to investigate. In the role of agricultural researcher, I could have answered this question, but I wanted something different! My starting point was that the questions would be their own questions. They just didn't have any. How could I make their own questions visible? During the monthly meetings before and immediately after the take-over of the farm, the tension rose between their wish and my reaction.
Three months after the actual start in October, there was a joint tour of the fields. To my surprise, I saw that four different wheat varieties and three different rye varieties had been sown. They were doing comparative variety research! The research was already underway! Apparently, despite our conversation, their ideas about the forms research takes made them blind to their own questions. The questions became visible when I looked at what was being done.

At the same time, Ashby and others describe how information and research work in developing countries [4]: when you ask farmers at the kitchen table what concerns them, you mainly get stories about prices and politics. If you stand in front of a field with different types of potatoes, you will hear the biography of the farmer and how it is intertwined with the development of those different potato varieties.
So literally standing next to the farmer and watching him or her helps both the farmer and the research supervisor to get the farmer's own research visible, namely what is being done.

2.2 Individual and general as a contrast

What is the reason that the farmer's research is not seen in his or her own practice? The common norm in science is that controlled and standardised observations are (statistically) abstracted. Concrete, individual perception merges into an average result, which pretends to have universal validity. This 'law' is then passed on to the farmer as advice.
A farmer, on the other hand, tends to say when showing his practice: "This is how I do it here." The emphasis is on the individual situation, on the 'I' and the 'here'. There is no pretence of general validity. With the expectation that science

discovers general laws that apply in every practice, the presumed primacy of science over practice is created and maintained.

An example:

Example 2

'Rational arguments' versus 'personal meaning'
Scientific conference 100 years BD [5]

Researcher Jürgen Fritz, University of Kassel, presented the Swiss DOK field study, which has been quantifying the difference between conventional cultivation with only artificial fertiliser, conventional cultivation with artificial and animal manure, organic cultivation with animal manure and biodynamic cultivation with compost and the BD preparations for 45 years. After 45 years, it can be concluded that the soil structure of the biodynamic test fields is much better than that of the other three. Compared to conventional cultivation with only artificial fertiliser, the biodynamic agricultural soil contains 18% more humus, 40% more microorganisms, 83% more soil activity and 37% more mineral mobilisation. BD agriculture also scores very well in terms of climate, using less energy and sequestering more carbon in the soil. In addition, the better structure makes the soils more resistant to excessive rainfall and drought.

Furthermore, Fritz presented new research results that show that the application of biodynamic field preparations has a positive influence on the resilience and nutritional value of plants. Field research shows that pumpkin - harvested from a field treated with biodynamic field preparations - can contain more than twice as many antioxidants as pumpkin grown in the same way, but without the use of preparations. Not only the nutritional value, but also the capacity of plants to cope with stress conditions improves significantly.

During the panel discussion with those present in the room, it was noted that the results nevertheless did not lead to an acceleration of the social acceptance of BD agriculture. "So what is the point of scientific research?" The results of the measurements are also insufficient reason for non-BD farmers to start farming differently. Soil scientist and biodynamic farmer Tom Saat mentioned the aspect of 'the will': If 'the will' is missing, there are no opportunities to switch in an effective way. The panel members on stage and the audience strongly agreed with the fact that switching to BD agriculture is more than propagating rational arguments consisting of research results. Conversion should also be encouraged by underlining the personal significance that the change can have for BD farmers.

By naming 'the will' and personal meaning, the person is involved in the conversation. However, the presentation of the scientific results is only about the effects of certain measures on soil and crops. It therefore seems as if the farmer himself does not play a role, while the work on the farm is of course always done by

someone. A person who, even within the standardised set-up, has his own points of view and makes his own choices. Man makes agriculture a practice, a reality. I experienced that the practitioners drew attention to that aspect with their reactions during the panel discussion. They are existentially linked to their practice, of which they recognise the concrete, individual weaknesses and strengths.
So there is a contradiction between the standardised, general results of a comparative study and the practical situation.

2.3 Research is also a practice

A first step to bridge the contradiction is to see that the scientist, in example 2 Jürgen Fritz, is also closely connected to his practice, namely the practice of research. He is completely into this as can be seen in the enthusiasm with which he shares the results.
In the DOK study, the study is described as a systems study, in which different agricultural systems are compared with each other. With that description, it is generalised and this generalisation arouses the pretension: "We investigate your practice.", which is not the case. Tom Saat already indicated in the panel discussion that in a real system, i.e. at farm level, in the biodynamic variant, for example, the manure comes from cows that also receive feed crops from that variant [6].
What's more, the plots where the DOK research is conducted are in a certain place that is not comparable to any other place where someone has a farm. It is very special that for 45 years four variants of fertilisation have been maintained consistently side by side. It would be right to describe the DOK study as an experiment with four variants of fertilisation, inspired by different practical systems. This way the researcher lets you take a look at his practice. A farmer can then watch and be inspired.

2.4 Beyond the opposition general – individual

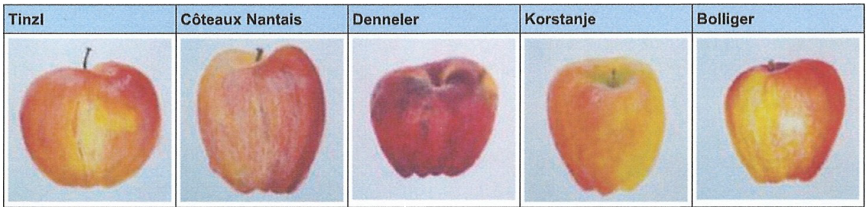
Another step is to recognise that striving for universality is a normal human endeavour. Everyone is looking for what is similar, for laws that cover the idea at work in certain things. Without ideas, you are rudderless and have no reference point from which to work. A great example is the following research:

Example 3

One origin, planting on five farms [7]

Piet Korstanje

"In my own farm, I have always greatly appreciated conducting the same research not only on my farm, but with several farms. I catch myself looking for generalities, say the plant ABC. It does show how different the farms are, and everyone's individuality. That also makes it interesting. The best example I know of is the research on the Pilot apple variety, which we have planted at five farms in Europe. All with the same origin from one tree nurseryman. The apples were all different for each farm. The growers could point to their own apples, while all origins were mixed up."



Ideas are used to describe generally valid 'laws'. Practices, on the other hand, are diverse and unique. As soon as the 'general' idea is imposed on the practice, and the practice is squeezed into a blueprint, the environment, which makes a practice unique, is left out of consideration.

Practices are different expressions of the idea and by observing different practices we can grasp an idea. Man plays a central role in searching and finding the relationship between idea and practice.

We transcend the opposition between general and individual, when we take each individual practice as an expression of the general idea and respect the specificity of both the idea and the practice. Then there is no contradiction between the two and you can speak of a monistic principle.

2.5 Applauding diverse practices instead of a general solution to environmental problems

It is striking how little impact the warnings of the Club of Rome — issued 50 years ago about environmental degradation, resource depletion, and the looming threat to our planet — have actually had. There has still been no 'turnaround', no reversal of "We should..." no acceptance that "We finally have to ....". The journalist Wolfgang Held describes [8] how, from a philosophical and sociological point of view, the lack of such a turnaround is described [9] as a dramatic postmodern challenge: The general (the insight that the world is going to end) cannot be fought with the general (no-one is allowed to eat meat anymore). The emancipation that has been initiated with self-realisation and self-determination as its most important values opposes a general well-being determined from above in favour of spontaneity and diversity. "Whereas the hitherto topical narrative was about a life 'out' of the crisis, it tells the novelty of a life 'in' and 'with' the crisis. Is that fairer? In the new narrative: No one 'must' save the world, but everyone is invited to save themselves. Maybe then, beyond all the 'must' and 'will', we will start to save the world," says Wolfgang Held.

A struggle *against* the existing situation turns into taking individual initiative, which can lead to something new. When drawing up a research programme that starts with the individual farmer and his or her individual farm, the question also arises: "What do others gain from this?" Although at first they may gain nothing, they may be inspired to follow their own individual paths, setting in motion developments that lead to more diversity and more humanity in agriculture.

2.6 A theory of practice

A theory tries to describe universally valid laws, whereas a practice, as we have seen, is always individual. When we talk about a practice-oriented theory, it is about bridging the contradiction.

Research into practices from those practices can lead to a practice-oriented theory. This practice-oriented theory clarifies those practices. In this case, because it is about professional action, I use the framework as developed by Robert-Jan Simons, following Bernard Lievegoed [10]. The practice-oriented theory is: The more you, as a farmer, researcher, service provider, policy officer, etc., use the methodology/techniques, vision and basic attitude put forward in this study in mutual coherence, the more a human-inclusive agriculture will be realised.

- Vision means that you have concrete visions of the future of your profession, about what you will carry out as concrete activities in 5 or 10 years when your ideal is realised and commonplace. It is about what you will contribute with your profession to a greater whole, to the challenges in society in 5-10 years' time.
- Basic attitude concerns the values and principles you use.
- Methodology / techniques are those that are characteristic of your profession and of which you know when you can best use one or the other. Based on your vision and your basic attitude, you know when to follow the techniques and where you are free to deviate from them.

3. Developmental Research Methodology

3.1 Unique situation and general idea in practice

In this chapter, I consider the question described in the previous chapter, the relationship between unique and general, from the perspective of concrete practices.

Everyone encounters unique situations in their work. One customer asks a slightly different question or has a slightly different need than another customer. Weather conditions play a major role in working in nature: the wind or precipitation turns out to be slightly different than expected, the soil just a little moister when sowing than last time. Animals are also different: one cow is cuddly, the other is difficult to approach. In short, every (work) situation is slightly different from another. If you look at the big picture, you can say that it is part of 'life', of reality. Nothing is quite the same as anything else.

Someone who in his/her work knows how to shape ideas in a unique way in a concrete situation is considered professional, or skilled. He/she is someone who develops his/her ideas on the basis of his/her observations. An agricultural farm flourishes when a farmer works with 'green fingers'. This attuning of an idea to the concrete situation is what I call situational, intuitive action [11].

An example [12]:

Example 4

The visitor path in the stable.

Ben van Tilburg, WaddenMax

"We have a farm shop on our farm, where people often come and ask to see the barn. I'm proud of my cows and like to show them off. This urge became even bigger once we started converting our cubicle barn with slatted floor into a deep stable. I am also proud of this barn. We couldn't tear down the slatted floor all the way to the outer wall. That would have been too risky. Then I suddenly saw the possibility of turning the remaining edge of the concrete floor into a visitor path. However, we had to support this floating edge on the inside. It could not be filled with concrete, otherwise the outer wall would become far too heavy and sink

into the ground. We built a concrete wall directly under the floating part. The path was 60 cm wide and runs along the inside of the long outer wall.
We then discussed what material the railing should be made of: steel, wood, a rope? Steel would be too cold for this purpose, and a rope might make it feel too unsafe. We ended up with steel posts with a wooden railing in between. At the beginning of the outer wall, I built a door into the wall so that you can access the visitor path directly from the outside. Our customers can now see the cows for themselves whenever they want, and during a guided tour I can now proudly show them my "five-star hotel", where the cows can lie in the straw and have plenty of space."

The fact that the slatted floor could not be demolished all the way to the outside wall was initially experienced as a problem. From his vision and drive, Ben suddenly saw a new possibility in it: a visitor path. Situationally, intuitively, Ben realised an element belonging to him and his farm that made the farm even more unique.

In this example, we see how an idea: "I want to show my barn and cows to visitors" enters into 'a conversation' with the situation at hand. Development revolves around this 'conversation', which is created by the professional.

The physician Emma Bruns [13] expresses this tension between general and unique as follows:

> "The urge for order and cleanliness entails the risk that we do not keep an overview of the bigger picture, or that we erase or filter seemingly unimportant details that are extremely important for insight or overview. … There is an enormous tension between the binary world of the controllers with lists, Excel files and categorical diligence and the messy human reality. As a trauma surgeon in training, I fight that battle every day. For every diagnosis, there is a protocol, a care pathway, endless quality criteria that good care must meet. But both the four-year-old girl who fell out of the

climbing frame and the seriously injured motorcyclist sometimes waltz right through the protocols with all their humanity.
It is the charm and torment of a profession in which you work with people. ….
The broad outlines are there, but the person (patient and practitioner) and his context determine the nuance.
The digital world has placed a filter of apparent malleability over our human world. Directors and managers, but also ourselves, sometimes prefer to stay in that makeable world than in the real world. Doc-tors complain about the amount of administration, and I can fully agree with that, but I also see more and more old and young doctors who prefer to treat in the computer rather than grab a chair, sit at the bedside, and just listen."

3.2 The professional as a starting point

Harry Kunneman [14] appeals to us not to flee the swamp, the 'messy' human reality, for the false certainty of protocols, but to realise that the real world takes place in that swamp and that only by facing it can you get solid ground under your feet here and there.

Professionals can deal with the swamp. They judge for themselves what is at stake and what is possible and appropriate to their situation. They act situationally, intuitively. A protocol or another representation of what should be done would stand in the way of addressing the situation and the other person.

Example 5

Low-emission farming: a farmer's solution
Northern Frisian Forests [15]

In the Northern Frisian Woods, as elsewhere, there was acid rain. An 'ecological guideline' was promulgated nationwide. This directive introduced a series of restrictions for livestock farms. In the Northern Frisian Woods, those farms would be closed. The farmers had always taken care of the tree banks that are so characteristic of this area making it a diverse landscape. But now it was precisely these tree banks that led to the restrictions. The farmers, organised in two associations, consulted with the government, with the vision: We take responsibility for nature and landscape, provided we are given the necessary opportunity to do so. With the postponement of the measure for several years and financial support, the opportunity was actually offered.

A 'farmer-driven' action research effort was started, supported by Wageningen. A substantial nitrogen reduction was soon achieved: The surplus of 360-400 kg N/ha/year fell by a third in three years, between 1995/1996 and 1998/1999. This change was achieved through a multitude of small, but well-coordinated adjustments in the farm management. The quality of the manure was improved by feeding less concentrate and lower-protein roughage. The latter was achieved by spreading less fertiliser and mowing a little later. The improved manure brought about an improvement in soil life, so that the supply of nitrogen through the soil increased, resulting in equal or increasing grassland production. These changes in feed led to healthier cows and higher milk production. All these technical and economic key figures were monitored by Wageningen and discussed with the participating farms. The discussion and comparison of the specific farm data played a crucial role. It became a shared search with convincing results. The balance improved. The acid rain demonstrably decreased.
In the years 1979 to 1985, a very good grassland farmer increased the fertiliser and concentrate dosage in line with national developments for the entire farm, from 5,000 to 7,000 kg N/year. Because of his concerns about the declining quality, he reduced nitrogen imports to 2,600 kg N/year in the seven following years. This capacity for improvement was passed on to the next generation. 25 years later, the import of nitrogen has been gradually reduced to 900 kg N/year.
An interesting side effect is that between 2000 and 2022, the number of dairy farms in the Northern Frisian Woods only decreased by 18%, while the national decrease was 40%. It is impossible to say whether the farms in the Northern Frisian Woods are more attractive to successors because of the farmers' connection to the developments on their farms or because of the better financial results, or other reasons. The fact is that more people remain connected to agriculture.

Biodynamic agriculture does not use artificial fertilisers, pesticides and a large input of animal feed. These are all means that push the uniqueness of the natural place into the background and therefore make farms look alike.[16] If you do not use these resources, the special nature of the natural state of each farm situation will play a more important role in farm operations. As a biodynamic farmer, you want to make use of the natural possibilities available in your situation. In such a practice, one draws largely on one's own professional skills.
I have already characterised the professional as someone who acts situationally. I now add: he or she is someone who learns from his experiences (investigative). When these experiences are then shared with others, both their own learning ex-

periences and the effects, we call this type of re-search 'developmental research'[17] to distinguish it from evidentiary or contemplative research.
When people as professionals are taken as the starting point and engine for development, it appears that there is also room and interest for other people who come into contact with that practice, for example, as customers or employees. In agriculture, there also appears to be room for many more people than in a numbers-driven or purely nature-inclusive agriculture [18]. You can therefore speak of a human-inclusive agriculture from several perspectives.

3.3 More about developmental research

The work of a professional turns out to have an initially unexpected characteristic: not knowing. The restraint, the 'taking a step back' turns out to be necessary to find a new way from connection and imagination. These three skills (holding back, connecting and imagining) can be made conscious and practiced [19].
The following example from a research group of farmers helps clarify this way of working:

Example 6

Broad-leaved dock

Walter Weidmann, Switzerland [20]

"When I switched to biodynamic cultivation in 1995, broad-leaved dock was one of the biggest problems for me. My father had been fighting broad-leaved dock chemically for decades and yet it was still everywhere. There is no way I could get rid of it by hand. On our farm with slopes at an altitude of 550 metres, the maize can only be harvested late, so the soil doesn't dry out. The soil is then heavily compacted by heavy machinery during harvest, which leads to a lot of broad-leaved dock the following year."

Looking at it like this, broad-leaved dock is a problem that needs to be fought. In a working group, in which Walter participated, the working hypothesis was put forward that weeds restore an imbalance in the specific natural balance of the farm. From this point of view, broad-leaved dock suddenly becomes interesting. Can I learn from how broad-leaved dock does this? Then perhaps I can restore this balance myself, in a way that suits me and my farm.

In the working group, the participants put themselves in the shoes of broad-leaved dock to find out what broad-leaved dock does. Different people presented their experiences as: "the discus thrower", "the bassoonist" and "the kneading baker". The experience was then articulated respectively as "creating while expanding", " expanding while creating" and "holding while expanding". This putting yourself in the shoes method is called empathetic perception.

"Apart from this search process into broad leaved dock, I had worked for years with farmers in the neighbourhood taking care of a marshy nature reserve near the farm. To keep the area open, a mixture of reeds, marsh grasses, horsetail and mint had to be mown annually. Nobody actually wanted this mown material and it had to be disposed of and destroyed. I then suddenly had the intuition to spread this mown material on the maize field after the harvest and mix it in. It was then ploughed. It looked terrible afterwards. The cuttings were so long and tough that the plant remains kept sticking out of the ground everywhere. That annoyed me. But at the same time it suited my idea. An artificial meadow was sown the following spring. Normally we have to harrow twice in spring before the soil is fine enough to sow. Now once was enough. The soil was loose and crumbly. The broad-leaved dock hadn't completely disappeared, but the field was unrecognisable, so different from before. The artificial meadow also produced a good yield. So I no longer panic about broad-leaved dock."

In this example, as in example § 2.1, we see someone looking for a way to deal meaningfully with what occurs in his situation from a place of connection and responsibility. Having a different idea about weeds helps, because it is not a problem that needs to be controlled, but an example to learn from. Such an idea assumes connection and responsibility and strengthens it. It has an opening and inviting effect. Broad-leaved dock is getting interesting. Explicit research starts with such an inspiring idea.

In this open space, the connection of the farmer to his farm, to his environment and to Broad-leaved dock leads to a unique action. The uniqueness of his farm is reinforced with this action. Moreover, the clippings are not disposed of as waste

and destroyed, with all the negative consequences for the environment, but the fertility of the soil is increased and CO^2 is captured. It is a movement of involving and including, instead of excluding.
It is generally known that broad-leaved dock and soil compaction have a lot to do with each other and that ploughing and supply of organic matter are excellent remedies. In retrospect, this 'explanation' for the successful action can be given. In this sense, general scientific knowledge clarifies individual practice. However, this knowledge turned out not to be sufficient to achieve this unique action. It was necessary to first give space to the implicit connection with the situation. In the intuitive action, the 'normal' knowledge is then automatically included. Often only the 'logic' is communicated afterwards and not the creative process, in which stepping outside the ordinary path can be an important part.

3.4 Perceiving while empathising and aligning while empathising

If you want to do justice to the uniqueness of a unique situation, the first condition is that you put yourself in that situation, that you empathise. That is what every professional does naturally. You dive in and see possibilities. When you keep looking from the outside, you are more likely to look for generalities, you start classifying, or categorising and so the individuality disappears from the picture. What then comes to the fore more strongly are the impossibilities, that which is wrong, what is missing.
This describes the **first** core of the methodology: You put yourself in the other person's shoes, you dive into the situation, you empathise. In short, you move along. You look empathetic. And for that you need to know very little about the other person or the object (a plant, an animal, an artificial object, a farm, an organisation) you are observing. Your sensory sensations, or the story you hear, soon enough offer enough clues to move with. So don't ask about the how and why, because then you get to hear all kinds of performances, which tempt you to behave like a better-knowing expert.

You gain experience while moving along. The **second** core of the methodology is to express that experience. That experience, which is the basis for your intuitive action, is always richer than what you can express. Being able to share it with others is what makes it research, so that expression, however flawed, is necessary. As human beings, we can express ourselves in images or words. Realise that your experience consists of moving along with what works so express yourself in images of professions or professional situations or in verbs.
A **third** core is that you can only empathise from a positive basic attitude. As soon as you criticise, you become a spectator. From the perspective of moving along, you always look for what is realistic.
A **fourth** core is that you look for opportunities to connect, to strengthen what is there, or how the other person is. Stopping or compensating is done from a spectator consciousness.
And **finally**, you reflect on what actually happens, what you have learned yourself and how the case or the other person has progressed.

The methodical core of 'perceiving while empathising' and 'aligning while empathising' ' is described as a theory of practice below:

1. Put yourself in the other person's shoes or the movement of the object, empathise. Move along with a movement of the other, an action of the other. You imitate from a positive interest: How does the other do that? Observe in yourself what you experience at that moment of imitation as movement dynamics.
2. Imagine your experience with a professional situation, a situation in which this movement has a positive meaning.
3. Take the two verbs which appeal to you from the description of the professional situation.
4. With the description of the image of the professional situation and the two verbs, you have described the other person's acting impulse or that of the object. Put 'while' between the two verbs. (The second verb then becomes a present participle.)

5. You imagine how you will connect to this acting impulse in a situation that you may encounter tomorrow or soon. How you can strengthen this. How you can align.
6. Finally, you can look back and ask whether you have perhaps aligned to this acting impulse before.
7. After a while, after the above preparation, investigate what you have actually done and what the consequences are.

Vision of the practice-oriented theory of 'perceiving while empathising' and 'aligning while empathising':

- Every person is taking initiative, every object is willing.
- Every person is busy building up experience and becoming more powerful in his or her acting impulse, in how he or she acts. Everyone wants to appear in their individuality.
- This acting impulse is not always understood by others and can then be experienced as disturbing.
- The acting impulse is always positive and focused on the environment, on the bigger picture, not on itself, not inwardly.
- The misunderstood behaviour is actually meaningful and can appear as meaningful and be experienced when you reinforce it, instead of wanting to stop it acutely.

Basic attitude of 'perceiving while empathising' and 'aligning while empathising':

- Say Yes, before you understand. Move along.
- Empathise.
- Always see the actions in situations.
- Get in yourself, do it, take it with you, instead of just asking the other person. Work together, instead of correcting.
- Focus on the common third point. Explore while advocating.
- It is already there, it already happens, is occasionally appropriate.

3.5 Conclusion

The more you empathise, the more the unique appears powerful and contributes to the development of the bigger whole. The less you empathise, the more disturbing the uniqueness appears and inhibits the development of the bigger whole.

Further elaboration

4. Research skills

Situational actions can only be 'new'. Does this mean that you have to wait until you have those intuitions and everyone is left to themselves? Or can you prepare for intuitive actions, without prefixing those actions so the intuitive retains its character? If preparation would only mean that you continue to look at the current issue from the outside, that does indeed lead to the recording of actions. You can also prepare differently, namely by empathising and moving along. That is what the professional does naturally and can be made more explicit. By empathising you strengthen the intuitive character. In this chapter I look at these and related skills.

4.1 Empathetic perceiving of the will of the other, the object

Empathy is a general human skill. This skill becomes a research skill when you express the experience you gain during empathy, in images and/or words. Then it becomes 'empathetic perceiving'.

In the example of the Broad-leaved dock, empathetic perceiving is immediately started. Sensory perceptions are only starting points for empathetic perception. You put yourself in the other person's shoes or the object. You move along, you participate with the will of the other. You don't have to perceive something completely, in all its manifestations, sensorially (phenomenologically) first. Seen from the will, each part is an expression of the whole (symptomatologically) and the sensory perception of a part is already sufficient to be able to empathise. [21]

When you empathise and act like the other, then you experience the inner drive, the will of the other with your own movement and will. Interestingly, you can only perceive your own empathy. You perceive your own movement with your three body-oriented senses: sense of life, sense of movement and sense of balance. Even without describing the perceptions of these senses separately, you can imagine and name the experience you gain empathetically.

4.2 Images and verbs as a result of empathetic perceiving

In the example of the Broad-leaved dock, after empathetic perceiving, the inner experience of the will of the object is expressed. The experience is expressed through an active thinking effort, or rather an active volitional commitment to thinking. Thinking is guided by the idea that you have experienced a positive commitment of the will in an empathetic way. With thinking a space is created, in which an image of that volitional commitment can appear. This commitment of will is about a will that is outward-looking and wants to make a positive contribution to the environment. It's about positive potential. “Weeds are not a problem that needs to be controlled, but an example to learn from.” The increased thinking activity is process-oriented, without forming representations and without the thinking content becoming decisive regarding the end result.

From the awareness that it is about an imagination and articulation of the will, images are sought in the field of professions and professional situations. Then the activity in that image is expressed with two verbs [22]: What does your person do in that profession, in that professional situation? After all, you are looking for images and articulation of the will. It becomes appropriate to limit the field of the images to representations of work and the wording to verbs. This makes the process less ambiguous and easier for everyone to carry out. When looking for a positive professional image, the moment often arises as: “I don't know”. This moment indicates the intuitive nature of this way of researching. There are no predetermined performance measures to categorise the experience.

When all types of images are allowed, the risk of negatively charged images and the perception that the images happen to someone is greater. After a few seconds of not knowing, someone usually sees a picture of a professional situation with surprise, in which the action initially experienced as negative appears as a positive quality. This is part of the intuitive nature of the process itself.

The order of first images and then verbs can also be the other way around: “Describe the activity you experience with two verbs, followed by: In which professional situation or profession does that way of doing things reflect quality?” The

first order works especially when a problem must first be transformed into something positive. The second, when the starting point is immediately positive, as is usually the case when you imitate a movement.
These images and verbs are perceived, in the sense that they are felt or seen and appear as movement. The images and verbs do not appear as something that happens to you, as mere revelation or inspiration, nor as something that is invented. It is a substantive response to one's own active commitment, which is purely methodical in character and does not predetermine the content. You can characterise them as imaginative (= image-forming) and inspiring (= conceptual) respectively.
The perceived concepts are new concepts. There can therefore be no question of any form of classification based on existing concepts, or categorisation. With these images and concepts you strengthen the individual encounter with the other. With this activity you create a foundation for intuitive actions.

4.3 Connecting with and strengthening the commitment of will

In this way, you intensify your experience and also give direction to your experience. Walter Weidmann thus prepared his intuitive action. He still acted from a position of not-knowing, but being focused on connecting with and strengthening a positive commitment to his farm, of what, through him, belonged to his farm in the environment and to the Broad-leaved dock.
You can further strengthen this intuitive process by thinking about one or more action scenarios, as long as they don't become protocols.
Crucial in this whole process is that you assume a positive commitment of will. You want to perceive that will, connect with it and thus support and strengthen it with your actions. And that works mainly with intuitive actions.
No problem is solved. The perception of that problem does not have to be interpreted by thinking about it. Being an expert relies on a methodical and not on a substantive level. In a problem approach, you remain an outsider, who comes up

with well-intentioned solutions from outside. From empathy you enter into a connection directly and unconditionally. You align with the other. You are a participant.

4.4 Intuitive acting

We are mainly talking about the intuitive action. Intuition is usually used in the sense of thinking intuition or feeling intuition. These three forms of intuition obviously have a relationship, but you perceive them differently. With the intuitive action, you are surprised by your own action, which fits into that situation at that moment without the intervention of a performance.

With the thinking intuition you will find the appropriate concept for your perception. Often you are not aware of such a thinking intuition, because it comes naturally and is self-evident. You realise this principle, for example, when you meet someone and don't immediately think of his or her name. You know that it doesn't help to think further. It is better to think of something else and soon after that the name will come to mind. In such a situation, you become aware of the intuitive nature of this thought process.

In everyday language, the word intuition is often used for a gut feeling, a feeling of 'something is not right', an emotional intuition. It's a signal: pay attention, something special is going on here. Your usual way of thinking and acting does not fit in this situation. The emotional intuition is an invitation to think and act differently than usual.

In these descriptions of intuition, the emphasis is on the process of intuition. There are intuitions that have an everyday character and those that determine life or that meet all kinds of conditions. When the latter are used as a norm, it strongly inhibits the joy of discovery of intuitions that are within reach and what you can already learn and develop from them. Having intuitions is then presented as something unattainable and turns out to be unattainable.

4.5 Conclusion

The more you put yourself in the other person's shoes or in the movement of an object, the more you empathise, the more intuitive action can contribute to the strengthening of individual practice.
You can actually do research to support intuitive trading.

5. Images and figures

The previous chapter is about images and concepts. In this chapter I will take a closer look at images in comparison with numbers. At the end of this publication, I will take the research into biodynamic preparations as an example of how these elements are used and the implications of the methods followed.

As a farmer and as a researcher, you always have to deal with a multitude of data. How do you arrange this data in such a way that it becomes expressive, that it 'speaks' and can inspire you for your actions? Images 'speak' and inspire. Marike Stellinga and Wouter van Noort explore the power of imagination in interviews with people who are concerned with the future of the Netherlands [23]:

> *Carolien Gehrels, director of energy transition at Arcadis, says: "If you imagine something, something happens. It stimulates the imagination. First draw, then calculate, is my motto. But politicians find it difficult to draw maps. When you draw maps, there is always someone angry, because they are, or are not on it."*
> *There is a need to get a grip on the large and complex choices facing the Netherlands. And so people start drawing themselves. Charcoal sketches, not blueprints. 'Chat cards' and 'talking boards'. These kinds of images can therefore provide a grip on major social changes and offer direction and perspective. But it's not the only reason people make cards. There is also a need for more imagination, to paint a picture of the future that is attractive. Politics is often about what the Dutch don't want, but what is the Netherlands we do want?*
> *Political scientist and urban planner Maarten Hajer knows how important it is to have tangible images in order to come up with creative plans. Visions of the future from politics are often spectres. They say: if we don't act, disasters will follow. They make a huge appeal to people's rationality. But you don't take people with you with arithmetic. The maps and visions of the future can help with that, precisely because they have something playful and creative, says Hajer: "There is a lack of frivolity in the conversation about this. That people can come up with a crazy scenario, to stretch the space to think. Such a big change as the ecological conversion we are in now is comparable*

to the reconstruction after the war. It's about despair, pride, mourning, and imagination – not just about statistics and science."

5.1 Images are a dynamic whole

Images play a central role in the methodical support of intuitive practice. You simply learn less by an explanation than by a demonstration of how someone does something. An example is an image. Vision, when it is concrete and you can see something in front of you, is an image. An image in which a future perspective is concretely depicted. We also use image in the sense of imagination, in an image expressed experience. You can also call that a metaphor. What is actually an image and what is special about it?

Each sculpture, whether it is a painting, a photograph or a sculpture, is a whole on its own. This whole is separated from the rest of the world, by a picture frame, by the pedestal on which the sculpture is placed or by another kind of frame. Within that whole, a certain dynamic can be experienced. A dynamic, a tense, restrained movement. It is a dynamic that you can empathise with. In moving along you can immediately connect with the image.

Example 7

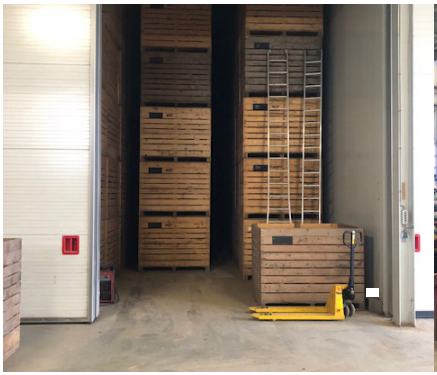
Stacking crates.

Jan Willem Bakker, BakkerBio [24]

"I often give assignments on the assumption that the other person will go his own way, improvise and at the same time see the whole.

For example, I asked an employee to neatly place the crates in the shed. Then I suddenly see that the crates are all neatly placed in the corner, close together. But tomorrow a truck will come, which has to be loaded with a number of those crates and then it is not so convenient that they are all close together and the crates that are needed are not at the front."

Crates prior to insrtruction



Crates stacked in corner

Neat and accessible

A given is that everyone directs his actions from an image, his own image, from a larger whole. Often this image remains implicit. If things go wrong in a collaboration, the other person says: “Oh, I had imagined something completely different for that task.” The challenge is to make the picture large enough for the situation and task in question and to help and stimulate each other in this.

5.2 The significance of images in qualitative research

A quality indicates a relationship: Something is good for something or someone. When I am in a meeting for a day, I have a different need for food than when I work outside for a day.

In the statement: “It is better for people and the environment when more vegetarian food is eaten”, a quality is abstracted and detached from an individual relationship. It is no longer about whether it is better for that one person in that situation, but for humanity in general. This is about an ecological footprint, CO^2 emissions, etc. and not about the needs of the individual person. This makes it a quantitative statement, even though the word 'better' is used.

Many issues are quantitative, and it is therefore more appropriate to approach them with quantitative research methods rather than qualitative ones. Two examples:

Example 8

Division of groups

When the first class of the Waldorf school in Stuttgart became so large that it had to be split, the teachers had endless discussions about who could best sit in the class with whom. There is an anecdote that Steiner, when he heard that, said: “Children whose names start with A to K go into one class and the other children into the other.”

Example 9

Type and dosage

With a homeopathic medicine, you can qualitatively determine which specific plant suits that one patient in supporting the healing process. Whether you then take flower, leaf or root to make a medicine out of it and whether you make that medicine with a potency of D10, D20 or D30 are quantitative questions. There you follow the previously and generally researched laws (e.g. flower and low potency for metabolic problems). This does not alter the fact that a doctor in a specific situation can intuitively decide to prescribe D30 instead of the D10 customary dosage according to the rules in that situation.

You cannot regulate the fate of the other person from the outside. You can put yourself in the other person's shoes and act from that alignment. Working with images is a qualitative approach. Images arise from aligning and the image has a connecting effect. In the end, that alignment is always an individual alignment. In the encounter, images and verbs act as inspiration for the intuitive action. This means that images have meaning in research aimed at strengthening the individual.

5.3 Image creating methods

In the so-called image creating methods (e.g. copper chloride crystallisation, round filter image, riser) the physically created images are compared with a reference series (from young to old, from immature to mature) and thus actually quantified. Or the images are categorised on the basis of a reference series. The images are therefore not formed internally, not from empathy. As a result the images are not perceived as an image that inspires a certain action, but as an external measurement of a quality. The person who assesses the image acts as an

expert with his judgment and the client can usually only look at the image with wonder.
Incidentally, the first time I saw the organic forms, which arose after a drop of ink was dripped into a cylinder of stagnant water, aroused curiosity and awe for something like 'formative forces'.

5.4 Steering on numbers or images?

As a farmer, you always have to deal with yields in kgs or euros, fat and protein content of the milk supplied, and so on, all expressed in figures. However, do you only steer your farm on those figures in your practice or is it more complex? In the following example [25] , the farmer does it differently:

Example 10

Feed analyses versus images of feed and cows.
Jelmer Zandbergen, Veld en Beek

"The other day there was someone from the feed factory, who had made analyses of the silage and based on those figures prescribed to me how and what I should feed. That's not how I work. I look at the cows, whether they have just calved, whether the weather is warm, cold, dry or wet, what types of silage I have available, spring silage, autumn silage, from a dryer or from a wetter plot, etc., and from those images I make choices about what I feed. I don't just look at the needs of the cows. If the cow had her chance, she would want to eat unlimited concentrates. I want to do something with the cows myself, I have my own need to work towards something. And of course in connection with the cow.
An intern recently asked about the feed value analyses. I experienced that I was pushed aside. Those numbers had more authority."

For Jelmer, a good ration depends on many aspects that play a role, not only the technical feed value expressed in numbers for VEM (Feed Units Milk), DVE (Intestinal Digestible Protein) and structure.
Emphasis on the numbers reduces the connection with and ability to work from that whole. Jelmer forms a comprehensive picture of cow, feed and farm. He uses that for his decisions and he wants to share that with the intern.

The farmer also steers from the images he has of his reality. The above example also shows how numbers have an authority, with which the individual, with his or her images, is easily pushed aside.
Figures and analyses are an abstraction of reality, they are imageless, and bring about a decrease in the perceived connection, in this case between the farmer and his cows and the feed and also between the trainee and the farmer. Without an image, the bigger picture view also disappears and as a farmer you feel compelled to follow the figures as protocols. Alignment, image and quality form a whole.
If a farmer can achieve a relatively higher profit with a higher loan, that farmer may still decide not to take out that higher loan, because such a loan with the interest and repayment obligation does not feel right at that time. As a human being, you have the freedom not to let the numbers 'drive you crazy'.
The philosopher and sociologist Jürgen Habermas describes this contradiction between number and image in his basic work [26]. He calls them 'system' and 'the lifeworld'. Both are needed! The lifeworld cannot continue to exist without a system, such as money, price agreements, tax rules, traffic rules. System is dead without the lifeworld. However, according to Habermas, system always has the tendency to colonise the lifeworld, while he sees it as the task of the system to facilitate the lifeworld, to be of service to it.

5.5 Figures can support farmer research

Numerical research can also be useful in finding individual solutions, see example 4 (§ 3.2)
There is an environment in which something changes (acidification) and in which something has to be done. The farmers do not allow the government to dictate what the solution should look like. This goes completely against their actual involvement in the maintenance of the landscape for years. They unite and together keep the initiative in their own hands and agree with the government on

the preconditions and their own obligations. Step-by-step, the farmers achieve the goals set by the government in a way that suits everyone. One strength of the project lies in looking at each other. There is also diversity within such a group. The goal is the same, but the solutions may differ from farm to farm. The input from Wageningen University is mainly to make the effects visible at all points in the system. For Wageningen researchers, all kinds of new insights are emerging about how the agricultural system works. The overall positive effect on cow health and balance is immediately noticeable to the farmers.

A fruitful interplay of a government, at the end of the nineties, appears, which indicates frameworks, in which a time space and goals are described, but no regulations, with initiating farmers and supporting researchers. So civil servants, politicians and researchers are also taking a step towards development.

In such an interplay there is room for each individual farm, each with its own individuality and its stubborn farmer. The frameworks are indicated in figures and the effect is also monitored with figures.

According to the government, however, in 2023, according to Jan Douwe van der Ploeg [27], there is [1]only one form of agriculture that every farmer must work towards, the so-called 'optimal agriculture'. In this agriculture, agriculture and nature are separated from each other and each is allocated its own space. So no inclusion, but rather segregation. The practice of optimal agriculture is characterised by a high level of input from outside the farm. Input of products (including fertilisers, pesticides, animal feed) as well as energy, capital and knowledge. It is the experts (from the animal feed industry, the banks, tax specialists, etc.) who largely determine what daily practice looks like. The government, which propagates precisely this form of agriculture, adds its input with the many regulations. One of the consequences of this high input is the increase in scale and the disappearance of people from agriculture. On the farms that remain, more emphasis is placed on management skills than on skills belonging to the agricultural profession. The farmer has been reduced to an executor of protocols.

When numerical research is given a service-oriented place in a larger whole, then there is already a different social force field and the research contributes to the further development of those other social relationships.

5.6 Depiction of numbers in graphs and charts, statistics

Images and figures are not necessarily contradictory to each other. In order to express the relative value of figures, they are often depicted with graphs and diagrams. Graphs, based on the rule that the vertical access should start with zero, are a visible and accurate expression of patterns and trends and relate to a whole. Interestingly, being able to read the images of graphs and diagrams awakens empathy.

Another form of processing figures consists of a statistical operation where the figures are processed in numbers. It then becomes even more difficult to imagine exactly what those figures relate to as the distance between result and reality increases. Those figures make a statement about an average, abstract situation, and not about the concrete situation in which you find yourself.

5.7 Conclusion

To inspire the actions of a professional in his practice, it helps to form and use images.

6. Concepts and models

6.1 In social science

In expressing the experience of empathy, concepts are used in addition to images. The special thing about how these concepts come about is that they are 'seen', they are not 'invented'.

This is similar to how concepts in social science research are formed using the techniques of Grounded Theory [28]. In the social sciences, it is common to develop insights from people's stories. The researcher highlights common concepts and looks at which other concepts are connected to these core concepts. In this method, the concepts are thus derived from reality, as it is experienced by people and appears in their stories. In my dissertation, [29] I elaborate on how the procedure of the Grounded Theory can be simplified and accelerated by mainly looking at actions and paying attention to verbs in the stories.

6.2 In practice-oriented research

The verb pair, which is perceived from empathy, refers to a unique acting impulse. With two verbs, an infinite number of combinations are possible.

In addition to expressing an experience, concepts are also used to interpret reality and thus find a relationship to it. Characteristic of concepts is that they are part of a network of related concepts and their content can be further clarified by also describing what it is not. When a few concepts are brought forward from this multitude of relationships, in their mutual relationship, a model of thought arises. There is a danger that these models will be superimposed on reality. In the direction set out here, it is about strengthening the individual, and this only succeeds when the concepts used are derived from the reality in question and are kept alive by using them with mobility. An example:

Example 11

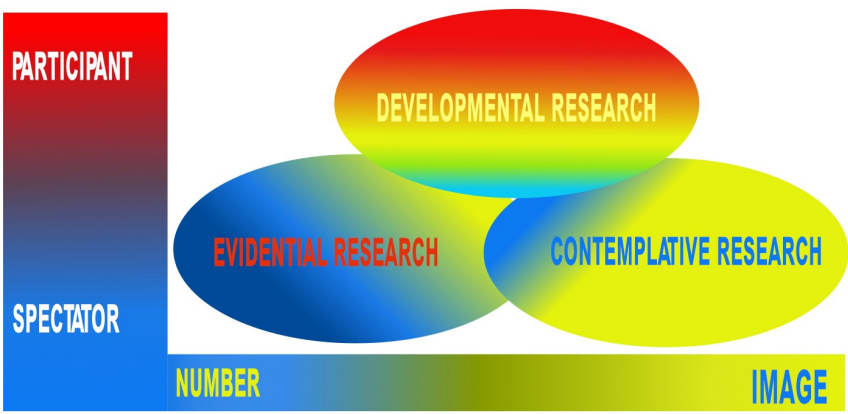
Albert de Vries: Three ways of researching

In § 3.2, three ways of research have already been introduced. Here they are once again portrayed as models.

As a researcher, you can be more or less a participant in the study, or more or less a spectator. As a spectator, you keep yourself out of the research. Another distinction in research is that between working based on numbers versus using imagination. From these two aspects, three ways of research can be distinguished:

In developmental research [30], a starting point is that as a researcher you are not a blank slate, but that you also practice a profession and thus carry guiding experiences, impulses and ideals within you that you want to develop further. From this connection with impulses and ideals, and the images you have of them, encounters take place, which acquire meaning and you have intuitive actions on which you can reflect. You are in the middle of the work process, experience all the steps and arrive at concepts yourself. You look for what works in that situation. In doing so, you automatically use a measure, which is not necessarily expressed in a number. You are also the subject of the research. You examine your own actions. You always do it from an ideal, a view of humanity. Everyone does research. You are also a participant yourself.

When it comes to research, people very often only think of evidential research. It's about measuring and weighing. It is numerical. You collect facts to prove something. So many percent of this, or so often that and so the conclusion is ... . You try to determine whether what others are doing is working. You generalise and automatically form images about reality. You can be personally motivated about the research, but in the research itself you look from the outside. You investigate from a spectator consciousness.



Three ways of researching

In contemplative research, consciously or unconsciously, you interweave existing models (typologies, categories or schemas) to interpret or contemplate your experiences. Or you can find a new model that explains why something works and assumes that it applies to everyone. You then consider being a participant from that point of view, while at the same time looking from the outside.

Interestingly, when I examined a volume of Medisch Contact, 28% of the articles were probative and 72% contemplative.

In the above model you can move in two directions: along the participant–spectator axis and along the numerical–imaginative axis. For me, it is not about determining which category a piece of research belongs to but about looking at the field of tension in which the research is located, which way it can move and what happens or is needed when you want to move the research along the axes.

6.3 Conclusion

The more a model is used in its mobility, the more it can strengthen individual practice. The more a model leads to categorisation, the more the individual disappears from the picture.

7. Researching is comparing

7.1 Comparing from an idea

Researching is actually always comparing something with something else. You can compare something from the past with something in the present. You can also compare something side by side:

Example 12

A different sowing time and a different pre-crop [31]

The farmer at Haus Bollheim grows his own rye seed and wants to investigate whether the quality of the seed improves if he sows later than is usual for the normal cultivation of winter rye. In the experiment, that part, about one tenth of the 10 ha field that is intended for seed, is sown six to eight weeks later than the part that is intended for bread grain (i.e. at the end of December instead of mid-October).
On this farm, the open period, which is created by sowing later, is filled. The normally sown rye has winter wheat as its precrop. The late-sown rye is precropped with spelt (an old wheat variety), which is harvested 2 to 3 weeks earlier than winter wheat. The open period is enlarged, so that buckwheat can be grown as an intermediate crop. By the nature of the matter, there is a difference in precrop between the varieties due to the difference in sowing time.
In one particular year, due to the weather conditions, the spelt cannot be harvested early enough and the time for buckwheat becomes too short. Mustard is sown as an intermediate crop.

"When setting up the experiment, the open period and its interpretation were not discussed with me. What happened therefore was a surprise to me. One can dismiss the fact that I did not include the precrop in setting up the research as stupidity. However, one can also look at my intention to leave as much as possible to the farmer. I could also have scolded the farmer for disrupting the experiment. In retrospect, it became clear to me that the difference in precrop was unavoidable in principle. However, this is usually how people think when researching sowing times. This research always takes place in trial fields, where the difference in precrop is not seen. They only look at what they have come up with in the trial design, which are sowing time differences.
Such an experiment shows that every farmer who wants to do something with late sowing in connection with growing his own seed must also do something with the open period that this creates in the crop succession. What the farmer does has to do with his specific

situation. In this study, it is not possible to distinguish between the influence of the difference in precrop and the difference in sowing time on the quantity and quality of the rye. These aspects can never be separated. Leaving the soil fallow during that time also makes a difference! However, research could be done into the influence of different precrops with which the open period can be filled, for example on seed quality."

A 'sowing time later in the year' is in a way a fairly abstract concept. The farmer envisions a hectare of land that should remain fallow all this time. That does not fit in with his image of biodynamic agriculture, in which you try to keep the soil covered as much as possible. The farmer imagines the larger gap between the precrop and the new crop to be sown. He sees a crop in this and in order to get that crop to fit into the whole, he increases the space between them by choosing the spelt to be harvested earlier as a precrop instead of winter wheat, a crop that is also grown on the farm as standard and for which the hectare of land is exactly suitable.

In this example, it also becomes clear that not only is imagining an important activity in preparation for situational, intuitive action, but that imagining also plays a role in forming concepts yourself. 'Sowing later in the year is beneficial for growing your own seeds' is initially an idea that comes from outside, a concept. This farmer does not follow this purely as a protocol. He changes the concept. In the reflection on that action, it becomes visible that the concept of 'increasing the inter-cropping space', the concept of 'sowing later', is broadened and individualised. This can be inspiring for other farmers, who while using that idea still go their own way in their situation.

The moment that research in practice is supported from the outside and thus made explicit, it is important to give space to the intuitive reality of that practice and not to lay down everything in research protocols in advance. So not only the practice, but also the research in that practice is then individualised.

7.2 Comparing abstractions

In and around the field of biodynamic agriculture, comparative research is regularly carried out between biodynamic, organic and conventional products. In such comparative product research, it is assumed that 'the' BD product exists, just like 'the' conventional product. An example:

Example 13

OBS research [32]

"In the early 80s, I was an employee at the Louis Bolk Institute and I participated in the comparative research at the OBS (Development of Farm Systems). In the NOP, three farm systems (biodynamic, biological and conventional) were investigated and compared with each other. The farm systems were located next to each other on the same land and had the same farmer. To keep the three systems comparable, not too many adjustments could be made, which could result from each system separately. In a way, they were abstractions of those systems. Five other organic and biodynamic farms were involved in the product research with a neighbouring farm for comparison.

There was a conventional grower among them, who was very aware of the quality of winter carrots and how he influenced it. In most measured values, the winter carrot stood out above the other organic and biodynamic roots. The hypothesis that BD products always had a higher quality than conventional ones was disproved. 'The' BD product turned out to be an abstraction, an illusion.

One of the other problems that arose was that of determining the harvest time. Carrots on the OBS-BD farm matured faster than those on the OBS-Co farm, so you had to harvest them natively earlier which meant you could no longer do comparative taste research on freshly harvested carrots and when you did, you also compared ripe with unripe carrots, or ripe carrots with overripe carrots. Or you compared carrots that had been stored for a longer period of time with carrots that had been stored for a shorter period of time.

A third problem was the reference in taste research. The test subjects were used to a certain product and considered the other product as abnormal."

But 'the' BD product does not exist, nor does 'the' conventional product. Comparative product research takes on the character of evidentiary research. And that evidence is usually not provided with such studies. The research always takes place within a specific context and it is only justified to make statements that include that context: “The OBS BD carrot, harvested at the native harvest time, was, after two months of storage, sweeter than the OBS conventional carrot, also harvested

at the native harvest time (two weeks later), after 1.5 months of storage under the same conditions."

It is characteristic of biodynamic agriculture that you involve the environment in what you do. Every farm, every action always has a context. In this way, each farm also becomes a farm individuality and thus unmistakable from any other farm individuality. It is precisely the number-driven scientific thinking about agriculture that pretends that the context does not play a role. Such thinking leads to an agriculture, in which there is no longer any relationship with the environment.

According to the general rules of science, in a general comparison you have to make it clear how large the sample is and whether it is sufficiently large and taken randomly to justify a statement about everything it could involve.

The lesson we learn from the above experience is to take the context realistically and also individualise research. If you want to compare, make a comparison between alternatives that are both realistic for the situation in question and the farmer. Such a comparison helps you to move forward as an individual farmer and can provide inspiration for other farmers.

7.3 Ethical comparison

It is ethically responsible to compare only those options that are realistic in the practice in question and where there is a demand to make a choice between the alternatives to be investigated. In this way, the farmer also takes responsibility for and is involved in the research. This leads to improvements in the research, as described above. If the research does not fit in with that individual practice, there is a good chance that the farmer will 'accidentally' harvest the test field anyway, sow too late, and the like.

Comparisons can also be made within a group of professionals, in such a way that everyone can learn from each other and find his or her own situational answers. Images are used to inspire practice and we are always looking for concepts that are appropriate to and cover that particular situation.

7.4 Conclusion

The more you compare only those variants that are real alternatives and try them at scale in individual practice, the greater the contribution towards the development of that practice will be.

8. Compost preparation research as a case study

8.1 The biodynamic compost preparations

I would like to outline here how different forms and views on research have their effect on daily practice with regard to the handling of the compost preparations. I am using this as an example precisely because it shows how disruptive it is to think from an individual practice and not from a generalisation.

The compost preparations were introduced in 1924 during the 'Agricultural Course' held by Rudolf Steiner[33]. This series of lectures forms the basis for biodynamic agriculture. In the fifth lecture, six preparations are described that can be added to the compost. For each preparation, a part of a plant (yarrow, chamomile, nettle, oak bark, dandelion and valerian, numbered as a preparation from 502-507) is 'prepared' with or without an animal organ at a certain time of the year in or above the ground, then stored and added to a newly set up compost heap.[34]

In the lecture it seems that different situations are described, in which one of the preparations can be used each time. In the subsequent questions and answers, there is mention of using all compost preparations in one compost heap, but not necessarily as a requirement that it must always be done this way. It is explicitly described in the lecture that the valerian preparation must be sprayed as a liquid over the compost at the time of application of the compost, not when the compost is set up, but much later. This preparation is not mentioned separately in the answers to the questions. Contemporary practice is to spray this preparation over the heap when setting up the compost heap, when all other preparations have been put into the compost heap.

The first study dates from 1928. Apparently it was (still) common in those days to apply the preparations separately.

8.2 Numbers dominate the images

An example in which both figures and images are present and ultimately the numbers dominate, is the report of Ehrenfried Pfeiffer's research from 1929:

Example 14

Preparation research in barley, 1928 [35]
Ehrenfried Pfeiffer, Loverendale

Pfeiffer investigated the effect of the two biodynamic spray preparations (marked 500 and 501) and the six compost preparations (marked 502-507) in the cultivation of barley. He compared the application of (1) the individual preparations with each other and with (2) the application of all preparations, (3) all preparations with a certain border planting (esparsette and horseradish) and (4) no preparations. This extremely short and brief report contains both photos (images) and tables with numbers. The test fields of $2m^2$ in size were harvested in their entirety and the barley from each test field was tied up into one sheaf and photographed.

The photos show a very diverse dynamic in the harvested barley as an effect of the application of the individual preparations. In the table, everything is reduced to a few numbers. Application of all preparations then appears to give the highest yield. The large numerical differences in the ratio of grain to straw are also ignored. Surprisingly, the specific border planting is not included in the protocol either, even though it gave the highest yield.

500 501 502 503 504 505

506 507 500-507 500-507 + borderpl. Control, dung without preparates

Variant	Sheaf wieght kg	Wieght stro kg	Correlwieght kg	Grain-to-straw ratio
Controle	1,25	0,695	0,425	0,61
Preparation 500	1,70	0,870	0,630	0,73
Preparation 501	1,30	0,700	0,420	0,60
Preparation 502	1,60	0,815	0,555	0,68
Preparation 503	1,45	0,730	0,470	0,64
Preparation 504	0,60	0,325	0,130	0,40
Preparation 505	0,75	0,400	0,195	0,49
Preparation 506	1,40	0,690	0,480	0,70
Preparation 507	1,80	0,960	0,600	0,63
All preparations	2,15	1,010	0,860	0,85
Ditto + edge plants	2,50	1,140	1,000	0,88

In this specimen study, the images and the figures remain next to each other and the images are then ignored in the conclusion. The quantitative, analytical has gained the upper hand over the qualitative, visual. The numbers then work as a protocol: this is how it should be done. I have not been able to find any other studies on preparations from that time. Perhaps this was the decisive experiment to apply all compost preparations at the same time and the spray preparations 1x/year from that time on? The numbers had more authority than the images and determined a protocol.
However, the images could evoke a sense of amazement at how different the effects of the different preparations were. This could invite further experiments, in which different agricultural situations with different crops would be investigated to see which preparation best suits a crop or the farm as a whole, as an individual entity. As far as I know, no such research took place at that time.

The fact that the figures in this study over-rule the images is all the more remarkable given the fact that this research concerns one of the core elements of biodynamic agriculture – a core element with which biodynamic agriculture wants to distinguish itself from other forms of agriculture. In my opinion, the uniform protocol for the whole world, which stipulates that all compost preparations should be used together at the same time, does not fit in with a biodynamic agriculture that strives for the greatest possible diversity.
In 2025, there is also resistance to this protocol among biodynamic farmers. It seems as if this is a resistance to do something prescriptive, when one wants to enter into one's own connection with the practice.

8.3 Explanatory models for the preparations.

The next two studies date from the mid-1970s when the biodynamic movement was experiencing strong growth. Only 10 years earlier, the 'agricultural course' had become publicly available. Apparently there was a great need to understand the 'agricultural course'. Explanatory models were being developed. In these explanations, the view that the compost preparations must all be applied simultaneously was the starting point and part of the explanatory model.

Example 15

The threefold human being as an explanatory model
Martin W. Pfeiffer [36]

Martin W. Pfeiffer takes the image of the threefold human being (nervous-sense system / rhythmic system / metabolic system) as a clear image for the farm-individuality. The threefold agricultural farm is then described as comprising:

- the mineral area, below the furrow, containing the worms
- in the furrow, the area where the cow converts leaf mass into fertilising manure
- above the furrow, in the atmosphere, the flower and seed area of the plants containing the bee.

The preparations are then classified according to the origin of the material and their supposed action.

… "There are eight preparations, and their substances are taken from the three kingdoms of nature: the mineral, plant and animal kingdoms. All the preparations can be divided into two groups. On the one hand, there is the group consisting of plant substances, the preparations, which are added to manure, compost and slurry - the so-called compost preparations. In addition, there are the two spray preparations horn manure and horn grit." .

… "In this way, the six compost preparations can be seen in their relationship to the threefold plant, whose growth and health must be promoted. Two specimens belong to the root area, two to the middle area of the leaf and two to the flower area. When looking at the order in which the preparations are indicated and discussed in the agricultural course, it appears that Rudolf Steiner followed the development of the plant in this respect from root through leaf to flower." ...

… "Seen from that point of view, we can say: the first two flower preparations, yarrow and chamomile, have to do with the earth's metabolism and belong to the root, while the last two preparations, dandelion and valerian, which belong to the flower, have to do with the cosmic metabolism ..."

Understanding becomes an explanation and with that the threefold view of man slowly but surely becomes a model.

Pfeiffer follows the tradition of using all compost preparations. This tradition is reinforced with this model. It is therefore striking that from the same model Pfeiffer recognises that there is actually still a preparation missing from the whole.

Example 16

The seven planets as an explanatory model
Bernard Lievegoed [37]

Bernard Lievegoed takes the model of the seven planets to better understand biodynamic compost preparations.
… "A process is imitated in the compost heap, of which nature itself gives us an example: when the caterpillar has eaten its fill of green leaf mass, then the moment comes when the higher spiritual butterfly principle wants to intervene. The caterpillar spins itself in and now goes through a decomposition process from head to tail, in which all organ forms of the caterpillar disappear and a chaotisation occurs. From this chaotic, common living substance the new organs of the butterfly are formed. Something similar happens in a compost heap. …
There is, however, an essential difference between this process in the animal kingdom and in the vegetable kingdom. In the animal, the astral is active from within, concentrated in the seven planetary organs, from which the seven astral operations radiate. In the plant, the astral comes from the environment and flows through and works through the plant from the outside.
If one wants the chaotisation process in the compost heap to proceed in such a way that the astral can harmoniously intervene in this physical-etheric substance, then one must, as it were, introduce planetary organs into the compost body, from which the planetary processes can irradiate the compost body and astralise it harmoniously."

Wanting to understand and doing it that way are aligned. Even though it is only an explanatory model, it reinforces the tradition of putting all compost preparations together and in the compost heap at the same time.

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8.4 Individualising with compost preparations

One hundred years after the 'agricultural course', there is plenty of individualisation in biodynamic agriculture. The perception that every farm is different and unique is described as belonging to biodynamic agriculture. It is therefore high time to use the impetus that has been given in a core principle of biodynamic agriculture, namely working with compost preparations, in this individualisation process. This can then contribute to making it a highly-conscious process and thus inspiring a wider audience.

Example 17

Individualising with compost preparation [38]
Albert de Vries

In November 2019, I introduced the idea of researching the variety of qualities at the Kraaybeekerhof market garden and looking for what could reinforce those qualities. A compost specially prepared with one of the preparations could be the answer.
During one of the monthly working visits I gave out my publication from 1991 [39]: The next time the reaction of the gardeners was: "Everything is already in here. You know how each preparation works. Just tell us what to do." But the question is: "What fits here? We don't want to work from general recipes or models."
At the next meeting, the gardeners wanted to decide which preparations would be used. Jola, who took care of the preparations at the Kraaybeekerhof, said that Kraaybeekerhof needed the Nettle preparation. Jola had the Agricultural Course with her and read the relevant piece. Then Jasper, one of the gardeners, had the idea that Dandelion was also needed. Jasper then read that piece. Was our decision already made or should we read the other pieces and test whether we noticed a need for any of the other preparations? When reading about the other preparations, the responses were:

- Oak bark -: "No, it is not relevant here".
- "The quality of Yarrow is completely Kraaybeekerhof so we can use it to strengthen the existing qualities."
- Chamomile - " Irrelevant."
- "Valerian should only be used when the compost is released."

This is how the gardeners came up with their plan for an experiment: a compost heap with all the compost preparations, a heap with only nettle and dandelion preparations, and a heap with yarrow preparation.
It was not that the gardeners now knew the answers. However, there was enough courage and curiosity to take on the experiment, to see if there were differences between the composts, and whether ideas and feelings arose regarding where to use which compost.

In the end, four compost heaps were made. Three had been prepared as intended. The fourth was still unprepared at the last meeting of 2020, in mid-December, where it also became obvious that Dave and Jola would take the lead. We went to a field that grew poorly and asked ourselves “What fits in with this field?” Jola read the sentences with which Steiner characterises the particularity of each preparation and it became immediately evident that Nettle was required here. The fourth heap was prepared with Nettle only and the idea was to apply that compost to that field in three months.

The individual approach gave access to working consciously with the compost preparations. Such a process may look different on another farm.

Champost + own greencompost + cow dung			
Yarrow preparation	Dandelion and Nettle preparation	All six preparations	Nettle preparation
Characterising as action impulse			
Respecting while connecting	Enveloping while uniting	Alienating while generating	Firing while uniting
Crop that fits in with this experience			
leafy vegetables	(Closed) coal	The potato field does not yet know what it wants to be	strawberries
Observations on the 4 compost heaps 02-03-2021			
wettest slightly basal mould odour (fraction of what champost smelled like) reddish brown	dryer, looser mould smell a little less, more earthy cooler, iron blacker	 sandy smell fruitier blacker	slightly wetter mould odour fruitier reddish brown

Qualities of the 4 different compost heaps Kraaybeekerhof, 02-03-2021

The financing of this promising project was stopped at that time

In any case, it is striking that a small addition of different preparations to the compost leads to perceptible differences. This experiment has given impetus to how individualisation can be done.

8.5 Guidelines as context for working with the compost preparations

In addition to how researchers and others think about the idea of compost preparations, there are also guidelines that a biodynamic farm must meet in order to be Demeter certified. Apart from the fact that the tradition is that all compost preparations are applied at the same time, the prescribing of the use of all compost preparations can be followed from the point of view of controllability and manageability. Here it is the trade that stands in the way of individualisation and investigative development. The Peer Assessment, which is used as part of the certification process, does attempt to facilitate the general aim of individualisation and stimulation of development.

In the same trade, there is now an impetus to start working with Participatory Guarantee Systems [40]. In the countries in which Participatory Guarantee Systems [41] were developed, Brazil, Chile and South Africa, there appeared to be a much greater diversity between the farms and on the farms than compared to the farms with a Demeter quality mark. It should be noted that the latter mainly grow for export and only grow a limited number of crops and the former grow many more crops and also local specialties for a local market. Such a certification does offer more room for variation and for direct conversation with the farmers.

8.6 Conclusion

Both the network around the farmers and the way people think about central themes of biodynamic agriculture can facilitate a further and explicit individualisation of farms.

Notes

Most of the publications below are written in Dutch and only the titles have been translated.

1. Harry Kunneman (1986): *The Truth Funnel. A communication-theoretical perspective on science and society.* Boom, Meppel.
2. Jan-Douwe van der Ploeg (1987): *The Scientification of Agricultural Practice.* Med. Vakgr.Sociologie 21, WUR.
3. Albert de Vries (2004): *Cultivating experiential learning. Research in my own work*. Thesis. Eburon, Leiden.
4. J.A. Ashby (1987): The effects of different types of farmer participation on the management of on-farm trials. Agricultural Administration & Extension 25, 235-252.
5. Biodynamic agriculture celebrates its 100th anniversary with scientific conference, Bio-Journal 22.11.2024
6. Muhammad Imtiaz Rashid, e.a. (2012): *Home field advantage of cattle decomposition affects the apparent nitrogen recovery in production grasslands.* Wageningen
7. Lucy van de Vijver, e.a. (2013): Biodynamic Quality in Fruit Growing - Recognising, Producing and Communicating. Louis Bolk Instituut, blz. 66.
8. Wolfgang Held (2024): *Holding the Ununtenable.* The Goetheanum, 29-11-2024.
9. Ingolfur Blühdorn (2024): *Unstoppability - On the way to another modernity*. Suhrkamp Verlag
10. See Albert de Vries (2004): *Cultivating experiential learning. Research in my own work.* Thesis. Eburon, Leiden.
11. Albert de Vries (2004): *Cultivating experiential learning. Research in my own work.* Eburon.
12. Albert de Vries & Geert-Jan van der Burgt (2024): *Connecting while imagining. How farmers think and work*
13. An explorative study with *biodynamic farmers.* Published by the Biodynamic Society. pp. 11-12. That publication contains two other, similar examples (examples 2 and 3).
14. Emma Bruns (2024): *Order creates a tidy false sense of security*. NRC Handelsblad, 8 June 2024.
15. Harry Kunneman (2012): *The critical humanism of Rudy Kopland.* In: Johan Goud (ed.): *Life according to Rutger Kopland. Our fleeting place of truth.* Klement / Pelckmans.
16. Abridged from: Jan Douwe van der Ploeg (2023): Closed due to nitrogen. Noordboek. Page 118-127

17. The idea of ‘farm individuality' is methodical in meaning. When you want to empathise, you consider each farm as an individuality, which you approach with respect and interest, no matter how much fertiliser and pesticides are used. In my view, the idea of 'farm individuality' does not have a normative character. Alain Morau describes (2020: *Die landwirtschaftliche Individualität als Begriff seit 1924,* in: *Literaturübersicht über die Begrifflichkeit des LK ....,* Witzenhausen) that within the biodynamic movement this concept is used differently and that sometimes the term 'organism' is used normatively when a largely closed material cycle has been realised on the farm.
18. K.P.E. Gravemeijer (1999): Developmental research, a practice-related research method. (In: B. Levering & P. Smeyers (ed.). Upbringing and education learn to see. An introduction to interpretive research. Boom Amsterdam, p. 233-256.) See also: De Vries, 2004: Cultivating experiential learning, (Eburon, Delft). Chapter 1. See also § 6.2 in this booklet.
19. Jan Douwe van der Ploeg (2023): *Closed due to nitrogen.* Noordboek. pp.118-127.
20. Albert de Vries & Geert-Jan van der Burgt (2024). See earlier.
21. Albert de Vries (ed., 2010): *Biodynamic Agriculture as a Culture of Intuition. On the example of the regulation of Broad-leaved dock*. Association for Biodynamic Agriculture, Switzerland. Albert de Vries (2009): *Over de grens kijken. Biodynamic landbouw als cultuur van de intuïtie.* Dynamic Perspectief DP 5
22. The method used here involves a phenomenological basic attitude and a symptomatological technique.
23. To be more precise: When you put ‘while’ between the two verbs you link them together and describe an activity that is in motion..
24. Marike Stellinga and Wouter van Noort (4 October 2024): *Charcoal sketches and talking cards: what will the Netherlands look like in the future?* NRC Handelsblad.
25. Albert de Vries & Geert-Jan van der Burgt (2024): Connecting while imagining. This is how farmers think and work. An exploratory study with biodynamic farmers. Published by the Biodynamic Association. Page 44.
26. Albert de Vries & Geert-Jan van der Burgt (2024): *Connecting while imagining.* Pages. 23. Biodynamic Association.
27. Jürgen Habermas (1981): *Theorie des kommunikativen Handelns.*
28. Jan Douwe van der Ploeg (2023): *Closed due to nitrogen.* Noordboek
29. Albert de Vries (2004): Cultivating experiential learning. Eburon.
30. ditto
31. K.P.E. Gravemeijer (1999): *Developmental research, a practice-related research method*. (In: B. Levering & P. Smeyers (ed.). Upbringing and education learn to see. An introduction to interpretive research. Boom Amsterdam, p. 233-256.)
32. See also: De Vries, 2004: *Cultivating experiential learning*, (Eburon, Delft). Chapter 1.

33. Christine Muggli, Herman lutke Schipholt & Albert de Vries (1990): *Saatgutvermehrung von Roggen auf Haus Bollheim.* Living Earth 90, 3, 176-182.
34. Meeting documents of the Scientific Supervisory Committee of the Experimental Farm Development of Farm Systems in Nagele, 1980-1989. PAGV, Theme Day Farm Systems for an Arable Farming with a Future, Theme Booklet No. 14, 16 December 1992.
35. Rudolf Steiner (2017, originally 1924): Fertile agriculture. Free Spiritual Life, Zeist.
36. Jola Meijer & Albert de Vries (2010): Making and applying biodynamic preparations. Biodynamic Association.
37. Ehrenfried Pfeiffer (1929): Ein Düngungsversuch mit biologische Präparaten. Gäa Sophia, Volume 4, Agriculture.
38. Martin W. Pfeiffer (1975): *The farm as individuality - an image of the human being : a contribution to the understanding of the preparations, applied in biodynamic farming.*
39. Bernard Lievegoed (1975): *Planetary forces and life processes, a contribution to better understand the compost preparations for agriculture mentioned by Rudolf Steiner*.
40. Albert de Vries (2020): *Individualising preparation*, Dynamic perspective, 2020.1 (In Dutch)
41. Albert de Vries (1991): *Creative search for farm individuality. Working with preparations in agriculture.* Research your own work Foundation, Arnhem.
42. (2024): *We all have to stand around the farmers.* Demeter Monitor, p. A 15.
43. IFOAM (2014): *Organic Participatory Guarantee Systems – a Brazilian model.*

Dr. Albert de Vries works independently as a coach, trainer, research supervisor and researcher.
With the method of Experiential Learning, Perceiving while Empathising and Aligning while Empathising that he developed, he aims to strengthen the initiative, quality and unique input of everyone. The result is a more inclusive society.

As a city boy, he learned to milk cows and drive tractors at the age of 11. He completed his biology studies in 1981. During his studies he followed the academic year of anthroposophical nature science in Dornach, Switzerland. He also worked for three months in livestock farming and horticulture on a biodynamic care farm in Germany. With fellow students, he founded the student biodynamic market garden De Uilenhof in Amsterdam.
He was involved in the establishment and early years of research in the agricultural department of the Louis Bolk Institute (1978-1987). In 1987 he started his own office: 'Research in your own work'.
In 2004 he obtained his doctorate as an educationalist in experiential learning.
From 2007 - 2013 he was chairman of the Biodynamic Association in the Netherlands.
He is currently a partner in a European consortium, Inclutrain, which is involved in the training of people with and without disabilities on care farms. He is also a partner in the international consortium GreenSouth, which is involved in the further development of training courses for biodynamic farmers in Mozambique, Zimbabwe and South Africa.
He is a part-time managing-partner at Maminka, childcare, a Sleipnir organisation (steward ownership).

In this booklet, the author shows how knowledge can arise from involvement and connection, from intuitive action, in individual practices. It is a challenge to clarify these practices in an investigative way. Perceiving while empathising and aligning while empathising is a methodology that makes both clarification possible and also contributes to the further development of those practices from involvement and connection.
It becomes clear that the representation of a science that is neutral and general is a fallacy. Knowledge is always placed in a concrete environment.
A picture is sketched of a knowledge and action practice that differs from the usual form. This gives an impulse to a different form of living together, in which people are taken inclusively.
Agricultural research is the context in which this story, with seventeen examples, takes place.