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21 Intuitive Farming

Heart-Based Decisions for Harmony in Agricultural Ecosystems

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INTRODUCTION: INTUITIVE COMMUNICATION AS AN AGE-OLD PRACTICE

Intuition is seen as a crucial component of decision-making in various fields, including psychology, business management, neuroscience and medicine. Most judgements and decisions rely on intuition to some degree, often because of time constraints and the virtual impossibility of obtaining ‘complete’ information (Kahneman, 2003; Nuthall and Old, 2018). Over the last three decades, agricultural science has also started paying attention to intuition, largely due to the growing awareness of different ‘ways of knowing’ that exist in indigenous and traditional agricultural systems (van Eijk, 1998). Yet the importance of farmer intuition remains peripheral to mainstream agricultural research, even though a review by von Diest et al. (2020) revealed that farmers in dairy, stock cattle, vegetable and mixed farming systems across various countries often prefer an intuitive approach over formal management tools and concluded that enhancing farmer intuition may improve decision-making.

Intuition allows access to tacit (internal, informal) knowledge that is not available through analytical processes, and which can aid holistic decision-making (Hogarth, 2010; Nonaka and van Krogh, 2009). Decisions that are ‘holistic’, from *holos* (Greek) meaning ‘whole’ (Smuts, 1926) consider more information or factors than using only rationale/logic, offering a more complete perspective of the situation in question.

Intuition also informs interspecies communication (two-way dialogue between humans and other-than-humans) (Erickson, 2011; Kieft, 2015; Kulick, 2017), which can bring additional, potentially valuable information to decisions. Sometimes called intuitive communication, this has received even less attention from agricultural science than intuition itself. While considered to be

‘New Age’ (Kulick, 2017), this phenomenon is supported by a century of scientific evidence (Dutton and Williams, 2009; Erickson et al., 2016), as well as in grey literature.

Indigenous cultures worldwide share the notion that maintaining a dialogue with other-than-human elements of their food production landscapes is crucial, for practical management reasons, as well as to evolve new strategies to adapt to changing conditions (Gagliano, 2013; Kieft, 2015; Parry, 2005). Even in the West, numerous organisations and intentional communities have been founded and operate with the belief that interspecies communication can be used to inform everyday practical decisions, including in food growing, such as the Findhorn Foundation (Scotland), Tamera (Portugal), the Damanhur Federation of Communities (Italy), Perelandra Garden (USA), Cooperative BioBalance (USA), and Govardhan and Auroville (India).

The existing evidence of the use of intuition and intuitive communication in food growing warrants more attention by both farming research and practice (van Eijk, 1998).

DEFINING INTUITIVE COMMUNICATION

DEFINING AND UNDERSTANDING INTUITION

Academic literature on intuition emanates largely from the fields of psychology and business management, and while these fields provide no unifying definition of intuition, they concur that it is an immediate, pervasive and involuntary part of all decisions and provides highly useful information beyond analysis (Dane and Pratt, 2007; Hogarth, 2010; Khatri and Ng, 2000).

A critical review of intuition from the nursing profession provides further interesting pointers as to its characteristics (King and Appleton, 1997). The authors explain that intuition is often described in terms of ‘gut feelings, sixth sense, insight, instinct, presentient, common sense, inner feelings, hunches, pre-monitions, foreboding and presentiment’ (ibid: 195). They suggest that, because of this non-rational element, scientists have deliberately sidelined it. Yet the authors stress that nursing would change dramatically if, or when, all forms of knowing are recognised as valid. Here, we may see parallels with the sidelining of intuition in the agricultural sector, as indicated earlier.

The etymology of intuition, stemming from *in-tuir* (Latin), offers another useful definition as ‘knowing from within’, in other words ‘knowing without knowing how you know’ (Hodgkinson, Langan-Fox and Sadler-Smith, 2008). Carl Jung identified intuition as one of four basic functions of the conscious psyche required for holistic orientation, along with thinking (comprising the intellect and logic), sensation perception (using sense organs) and feeling (more subjective valuation). Jung defined intuition as ‘perception by way of the unconscious, or perception of unconscious contents’, which enables humans to ‘divine hidden possibilities in the background’ (Jung, 1933 [1921]: 567–568). Jung’s definition remains widely accepted in mainstream psychology and management science, characterising intuitive decisions as those where one is not lucidly aware of the process preceding the decision (Dane and Pratt, 2007).

Yet, about two decades before Jung, Rudolf Steiner (whose lectures on agriculture form the basis of biodynamic agriculture) also examined intuition. He believed that intuition operates at a superconscious level, surpassing the intellect, which, when developed together with imagination and inspiration, enables super-sensible perception, i.e. perception beyond the five physical senses (Steiner, 1967). Steiner described intuition as one aspect of spiritual knowledge, and it may be for this reason that his interpretation is far less commonly acknowledged (von Diest, 2019).

In explaining how human cognition deals with information, social and cognitive neuroscience, psychology and related fields select just two of Jung’s four basic functions: intuition and thinking, to describe a dual-processing model. Here, the process of intuition is characterised as being fast, automatic, effortless, affectively charged (influenced by mood), associative (through pattern recognition) and not easily verbalised. This intuitive process runs simultaneously with the analytical or

rational process, which is slower, controlled, conducted with awareness, neutral and can be verbalised (Kahneman, 2003; Hodgkinson, Langan-Fox and Sadler-Smith, 2008; Keller and Sadler-Smith, 2019).

In an attempt to understand the mechanics of intuition, McCraty (2015) breaks it down into three types: implicit intuition – that is knowledge gained through tacit learning, which is the most commonly understood type; energetic sensitivity – when the nervous system detects and responds to signals in the environment, such as from electromagnetic fields; and non-local intuition – which is not limited to time and space, such as precognition or clairvoyance.

While intuition seems to operate with neural correlates across various regions of the brain (Keller and Sadler-Smith, 2019), the heart, which has an electromagnetic field 5,000 times stronger than the brain, seems to be involved in receiving, processing and decoding intuitive information and can respond to an event *before* it actually happens (McCraty, 2015). These considerations may explain both the immediacy of intuition and the possibility of the information originating from outside the body.

INTUITIVE OR INTERSPECIES COMMUNICATION

Some researchers have explored the associations between intuition and interspecies communication (Erickson, 2011; Kieft, 2015; McCraty, 2015). Dutton and Williams (2009) reviewed empirical and anecdotal evidence for animal psychic or paranormal phenomena (termed *psi*, such as is associated with non-local intuition), mostly between humans and domesticated or laboratory animals. The evidence supports the idea that there is *psi* communication between humans and other species, and the researchers conclude that future research in this area should carefully consider the assumptions around how *psi* is expressed and interpreted in animals. Erickson (2011) advises against clinging to conventional perceptions of human/animal communication. This accords with the discussion by Tompkins and Bird (1973: 22–24), on the scientific evidence for extrasensory perception (ESP) and communication between humans and plants.

Intuitive interspecies communication is described, not as a one-way flow of information, but as a dialogue, and the information is often conveyed somatically (through the body) in the form of feelings, sensations and emotions. From both epistemological and phenomenological perspectives, this makes it difficult to accurately translate into a linguistic form, and the authors call for an expansion of the theory of language, as well as the vocabulary (Gagliano and Gimonprez, 2015; Kulick, 2017). For example, the terms and concepts of ‘noetic ecology’ – the different ways of knowing nature (Zylstra et al., 2018) – and ‘ecofluency’ – the ability to fluidly and accurately communicate with other-than-human nature using an expanded spectrum of human sensory awareness (von Diest, 2019) – may help the exploration of the human–nature relationship through diverse ways of knowing and communicating.

APPLYING INTUITION IN FARMING

EMERGING RESEARCH ON INTUITIVE COMMUNICATION IN FARMING

While there is growing evidence of farmers using their intuition, Kieft (2006, 2015) provides the earliest published scientific research in English on intuitive communication informing practical management decisions in agriculture. Surveying farming practices in Europe, Sri Lanka and South America, he found that additional practices such as meditation and dowsing assisted in conversing with nature. Importantly, the reliability of intuitive information depends on one’s paradigm,

A set of ideas and assumptions on how people perceive life, beings, things, the natural and the super-natural and the processes in the world around them - determines what questions you ask, how you try to know nature, and hence how you farm.

Kieft (2015: 182)

Building on Kieft's work, a qualitative study was conducted between 2014 and 2020, through Stellenbosch University, South Africa, in collaboration with Coventry University, UK. The study included semi-structured interviews with 17 farmers and food gardeners in South Africa, the Netherlands, the UK, Italy and China. The following two cases are presented here as examples.

Case Study 1: From Conventional Dairy Farming to Dancing with Cows

In the Gelderland Province in the Netherlands, is a fourth-generation, family-run dairy farm, which by local standards is large, covering 50 ha and with a herd of 90 cows. It converted from a conventional to certified organic system in 1991, and in 2004, it became the first dairy farm in the Netherlands to stop using antibiotics and vaccines.

The farmer explained that the transition to chemical- and pharmaceutical-free farming was a struggle: while they continued to use a logical approach to select which of the more than 300 homeopathic remedies to apply, their success rate was only around 50%. However, when they started using their intuition, their success rate rose to between 80% and 90%, and they now rely almost entirely on intuition and interspecies communication to determine whether or not, and how, to apply remedies to the soil and to their animals. By 2014, the incidence of all diseases on their farm was so low that they were only having to apply three homeopathic remedies a year.

Soon after the family decided to stop cutting the horns off their cows, realising that it plays an integral part in their digestive and immune systems, and the 'identity' of the cows, they rebuilt their barn to a design that came from a conversation with the cows, in order to make them more comfortable. This design was oval, more spacious and open on all sides, and other farmers in the region have since copied their design. Over the past 10 years, the farm's dairy products have received local and international awards for their quality, and the family report feeling more satisfied with this method of decision-making. A documentary film 'Dancing with Horned Ladies' portrays their journey.¹

Case Study 2: Partridge Avoids the Pear Tree

In the Yunnan Province of China, near Kunming, is a farmer who applies Pure Land Buddhist practices in his red pear orchard, in particular playing recorded chantings of Amitābha Buddha's name to the orchard, changing the music with the seasons. He commenced planting the orchard in 2003 and now has 84,000 trees on his 1,300 mu piece of land (86.7 ha/214 acres). He applies no synthetic fertilisers, herbicides or pesticides and uses natural farming methods that surpass Chinese organic standards.

Under the guidance of teachers, he also learned to converse and negotiate with insects and small animals 'through will and thoughts' (intention), feeling and seeing the messages that come from nature. He uses 'truth, love and sincerity' to communicate with the plants, birds and insects on his land, treating every living being with equal respect, no matter its size.

Every day, he requests from the birds and insects that they only eat the fruit in the 26 mu area (2% of the total orchard size) that he has designated specifically for them as 'free food', and to leave the rest of the orchard for human consumption. The result is that, in the designated area, the incidence of bird and insect damage on fruit and leaves is now 86% on average, but in the main part of the orchard, the damage is negligible (usually <6%), yielding an average harvest of 94% of intact, high-quality pears. Although his yield is about 70% of what other local pear growers obtain with conventional methods, the quality of his produce is three to four times higher across several

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¹ <https://vimeo.com/ondemand/dancingwithhornedladies>.

quality parameters. There are now over 500 species of flora and fauna living cooperatively and ‘like a family’ in the orchard. The farmer maintains that this makes him feel happy and fulfilled, and for him, it demonstrates that animals have full awareness and consciousness and can communicate with human beings who choose to do so and who treat them with sincerity and love, thereby coexisting in harmony and prosperity.

This success in managing crop damage reported by the farmer in Case Study 2, through designating a portion of the crop’s area for other-than-human consumers, is similar to other cases in the study. Overall, the 17 case study farms report similar benefits to those described by Kieft (2006, 2015), such as reduced inputs and improved quantitative and qualitative outputs, resulting in greater profit margins, healthier farm systems and a more satisfied feeling regarding their decision-making. Of particular interest is that several farmers noted that they felt the heart played a role when receiving intuitive information.

THE TRANSFORMATION OF THE INTUITIVE FARMER

Regenerative agriculture is knowledge intensive, and transitioning towards this approach requires that the farmer has access not only to more knowledge to aid with analytical thinking, but also to greater sensitivity and better ‘knowing’ of the systems with which he/she is working. The process of developing intuition offers this access, involving a transformation of both the farmer and his/her worldview, which, in turn, leads to a deeper, more balanced and harmonious relationship with nature (Cox, 2014; von Diest, 2019; van Eijk, 1998; Kieft, 2006; Paxton et al., 2017).

As we have seen, intuition is not easily articulated, and while it is not emotional *per se*, it is affected by emotion, which can affect the decision-maker’s confidence and thus its accuracy (Hogarth, 2010). For this reason, Nuthall and Old (2018) argue that reflexive processes are required to help refine the reliable and confident application of intuition in decision-making. These processes include managing emotional triggers, observation and feedback with oneself and others, and gaining experience in a particular field of expertise. Nuthall’s book, *The Intuitive Farmer: Inspiring Management Success* (2016), based on extensive research by the author, is the only existing handbook that the author is aware of for developing intuition in management, which is aimed specifically at farmers and farm managers and offers accessible principles and guidelines for reflexive practices.

In a study on what constitutes healthy farm management, involving 79 farmers in Austria, Germany and the UK, Paxton et al. found that

learning to be intuitive meant that farmers had to dare to listen to their intuition regardless of rational explanation and, occasionally, in the face of criticism. The farmers felt they improved their capacities for managing farm health through mindful self-reflection and self-observation, meaning that farm health depends heavily upon personal development.

Paxton et al. (2017: 84)

Sadler-Smith and Shefy (2007) and van Eijk (1998) emphasise the value of meditation and mindfulness for developing intuition, as well as metacognition. Similarly, Erickson (2011) states that calm emotional states are more conducive for not only intuition, but also interspecies communication, and these states may be attained through regulated breathing and meditation practices, as well as other lifestyle changes aimed at stress reduction, including good nutrition, exercise, adequate rest and spending time in nature.

Several authors stress that improving somatic awareness is essential for accessing tacit knowing through intuition (McCraty, 2015; Nonaka and van Krogh, 2009; Sadler-Smith and Shefy, 2007). As Kieft (2015: 183) put it: ‘if we learn to better communicate with our body, we are also opening our mind for communicating with nature in a wider sense’. Developing a heightened

physical sensitivity may involve muscle testing or kinesiology, or using instruments such as a pendulum or dowsing rods (Kieft, 2006). Physical rituals are also important as they reduce the neural signals related to both performance anxiety and the impact of experiencing failure (Hobson et al., 2017).

As well as increasing somatic awareness in general, several authors also concur that the heart plays a central role and more attention should be paid to this aspect (Erickson, 2011; Kieft, 2015; McCraty, 2015). McCraty (2015: 52), in particular, explains how coherence between the heart's rhythm and the brain can be intentionally activated by focusing on positive emotions, thereby bringing intuitive signals of all kinds to the conscious awareness.

Various works by Steiner, including *Knowledge of the Higher Worlds* (1923 [1904]), provide instructions for developing self-awareness, as well as the capacities of intuition and intuitive communication. Other practical handbooks for developing these capacities include those by Andeweg (2009), MacManaway (2013), Conroy and Alexander (2014), Gurney (2001), Williams (2003) and Raven (2012). All these authors and many others recommend four common critical aspects: (1) to seek the truth through allowing the heart to guide decisions, (2) to meditate as a daily practice, (3) to spend time in nature, silently, and (4) to remain grounded. As Kieft (2015: 184) explains, 'the intuitive or 'sensing' techniques applied by farmers look very much like the way the mystic describes his/her access to deeper information'.

Based on the above, this author proposes that becoming an intuitive farmer is a journey of personal development and transformation, requiring courage and dedication. This may require psycho-social support, which is not currently available from mainstream agricultural organisations. Therefore, attention is required from not only farmers but also farm support services, researchers and policy-makers, to provide the supportive and enabling frameworks for farmers who wish to develop their intuitive capacities and thus become co-creative decision-makers with their farm ecosystems.

CONCLUSIONS

There is no unifying definition of intuition, but it is clear from the existing research that intuition is fast, is an inevitable part of all decision-making and provides useful and accurate information beyond whatever analytical approaches can access. The small, but growing, evidence base on the practical value of intuition and intuitive communication in farm management decision-making indicates that it deserves more attention from agricultural research and practice.

Some authors have found that intuition may also play a crucial role in intuitive or interspecies communication. Emerging research, such as the two case studies of intuitive farmers presented here, suggests that this co-creative approach to food growing holds the potential to offer farmers more agency, autonomy and confidence, to make better-informed, customised and more environmentally appropriate management decisions, not least because they gather direct feedback from the other-than-human.

Methods for developing intuitive capacities already exist for farmers. All of these methods emphasise the need to willingly and actively self-critique and manage emotional triggers, which may be supported through increased awareness of somatic sensitivity. The process of personal transformation in the development of intuitive capacities may be challenging and lengthy. But perhaps the transformation of the farmer in the search for inner knowing may be what is needed to help transform mainstream agriculture towards more regenerative, harmonious engagement with nature.

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