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Abstract

Achieving sustainable development requires sustainable management.
Permaculture is an approach integrating a long-term vision in agricultural methods and creating sustainable agricultural systems. By analogy with permaculture, we propose permanagement, a framework for guiding the design, selection, and implementation of management practices, within the perspective of sustainable development.

Keywords: Management, sustainability, permaculture, permanagement

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Introduction

Sustainable development, as defined by the United Nations Organization in 1987 is a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland Commission (United Nations), 1987).
Achieving such a development involves rethinking how business is conducted. One aspect of this endeavor has been to make businesses accountable for their possible negative impacts, leading for example to the so-called triple bottom line, considering social and environmental performance in addition to financial performance. Another aspect has been to go beyond this accountability and to contribute to global sustainability as a key purpose of the business activity.
It is important to note that sustainability encompasses all relevant issues – economic, social, environmental – and that it can be apprehended at different levels. The inherent long run of a sustainable perspective is meaningful not only at the level of the planet and the whole humanity but also at the level of society, of a company, of a business team, or of an individual (for example, see (Aubert, 2018; Meiller, 2020; Tran, 2014)).

Several macroeconomic models have been proposed to enhance sustainability of the economy or of society, such as the circular economy (Ellen Macarthur Foundation, 2021), the Doughnut economy (Raworth, 2017) or the symbiotic economy (Delannoy, 2017). In this paper, we propose to focus on management and organisations which ultimately make any model come to fruition. Considering an analogy between a company ecosystem and a living ecosystem, our work explores a biomimetic perspective. More specifically, permaculture as an interesting approach for integrating a long-term vision in agricultural methods, has appeared as a valuable source of inspiration to draw up a new perspective on management - permanagement.

In the following sections, we present the key elements of permaculture, discuss its efficiency in a context of sustainable development, and propose the concept of permanagement. Finally, we discuss both our method and the relation of permanagement to the management field.

Understanding permaculture

The term "permaculture" was first coined in the seventies by scholar Bill Mollison and his student David Holmgren. Their work was about developing a range of strategies in the perspective of permanent agriculture – an agriculture which can last, and which maintains the fertility of the soil – leading to the concept and word "Permaculture" (Mollison and Holmgren, 1978). Based on the observation, in Australia, of natural ecosystems, and of the different local cultures (including the indigenous ones), they assembled old wisdom skills with new scientific knowledge and identified key principles and patterns for sustainable design.
For Bill Mollison, permaculture was mainly a holistic philosophy with the hope of managing to build systems that would function as well as the Tasmanian forest: How to work with nature, rather than against nature? How to understand all plants and animals' functions and interactions rather than treating each element as a single entity? (Hemenway, 2015)

Indeed, the design, development and management of a permaculture site is based on
- a global vision of its ecosystem
- an analysis of its functioning
- taking into account its dynamics in relation to economic, social and environmental aspirations.

First, the permaculture system is founded on three "ethics"[1] (Holmgren, 2002):
1. Care for earth
2. Care for people
3. Fair share (do not use more than your needs and distribute the surplus)

Second, it proposes twelve principles (Holmgren, 2002):
1. Observe and interact
2. Catch and store energy
3. Obtain a yield
4. Apply self-regulation and accept feedback
5. Use and value renewable resources and services
6. Produce no waste:
7. Design from patterns to details
8. Integrate rather than segregate
9. Use small and slow solutions
10. Use and value diversity
11. Use edges and value the marginal
12. Creatively use and respond to change

As represented in Figure 1, the foundations of the framework are the ethics. They orient and guide the use of the twelve design principles.

Figure 1 The three ethics and twelve principles of permaculture.

[1] Drawing on "the notion of community", the authors define this term "as a series of universal principles on which a model of organisation is built". (Holmgren, 2002, pp. 43–45)

When creating a new garden, a new design, the principles are applied in order, from the first to the last, as an overall journey. When considering an existing garden or design, they are essentially applied separately, depending on each situation, addressing the specific needs or challenges faced.

In sum, the principles are not isolated. They interplay with each other and can be used separately or in combination. They form a lens through which problems can be solved and decisions made. The ethics and principles of permaculture propose an approach to agricultural system design which is holistic, sustainable, resilient, and regenerative.

Questioning the efficiency of permaculture

Qualitatively, “sustainability”, “resilience” and “regeneration” sound appealing. However, beyond the interesting conceptual approach to agriculture, it is compelling to pay attention to how impactful and how efficient permaculture is. If we consider the production of food, for instance, the output is key for humanity. Note that this concern for a concrete and useful output is part of permaculture itself (Mollison and Holmgren, 1978).

Interestingly, scholarly literature on this matter is scarce. (Ferguson and Lovell, 2014) review this relative lack of scientific work about permaculture. It shows a recent change, with a clear increase of the number of publications since 2008.

Among these recent studies, (Krebs and Bach, 2018) provide scientific evidence supporting each of the twelve principles of permaculture. Therefore, a positive impact from the implementation of these principles can be expected. Moreover, this study lists possible negative impacts of agriculture on the ecosystem and shows how permaculture principles can contribute to avoiding these pitfalls - i.e. doing better.

(Guégan and Léger, 2015) is a detailed real case study focusing precisely on the impacts of permaculture practices on productivity. It demonstrates a positive outcome both in terms of production and in terms of income for the producer. In particular, the authors point out that some specificities of permaculture contribute to the self-protection of the cultivated ecosystem, which in turn maintain the health of the crops and their productivity (p.39). We see here an impact over time: permaculture does not merely focus on the current yield, but on the capacity of maintaining a yield over time. Another point stressed in this paper is the relevance of the whole of the local ecosystem. The study integrated 1000 m^2 of cultivated land, but focusing exclusively on this parcel would be a mistake as the immediate surroundings (some of which were uncultivated) contribute directly to the behaviour of the cultivated part. The yield is not obtained independently from the rest of the ecosystem.

In these few studies on the efficiency of permaculture, we recognize two of its major characteristics: a vision over the long run as well as a global apprehension of the ecosystem. This holds when creating a permaculture system and also when evaluating its performance.

Intuitively, this inclusion of other factors such as potential impacts - positive and negative - on the ecosystem, and evaluation over a longer period of time, are coherent from the sustainable development perspective. More technically, some studies are considering this same approach for adapting the calculation of productivity to include a sustainable development vision - even beyond the agricultural world (see for example (OECD, 2016).

Management inspired by permaculture: Permanagement

The notion of "better business" and the goal of "creating sustainable value" can be aligned with the spirit and the goals of permaculture. Let's get inspired by permaculture to create a new perspective on management. Building upon the origin of the term permaculture, we propose to name this new vision of management "permanagement", as a contraction of "permanent" and "management". Indeed, we aim at developing an approach to management which integrates long-term projections into its practices.

As our proposition is to work by analogy, the structure of permaculture can be transferred to permanagement, around three ethics[2] and twelve principles[2].
The three ethics are the pillars of the permanagement system:

- Ecosystem impact – observe, map and manage your impact on your environment (minimizing negative impact and maximizing the positive).
- Employee flow – ensure everyone finds his/her "right place" in the organization and unleash his/her potential
- Perma-productivity – embrace an approach of productivity oriented towards sustainable long-term benefits.

As in permaculture, these three permanagement ethics are linked to twelve principles.
Table 1 lists the principles we propose, along with the twelve principles of permaculture.

Twelve principles of permaculture	Twelve principles of permanagement
1. Observe and interact 2. Catch and store energy 3. Obtain a yield 4. Apply self-regulation and accept feedback 5. Use and value renewable resources and services 6. Produce no waste 7. Design from patterns to details 8. Integrate rather than segregate 9. Use small and slow solutions 10. Use and value diversity 11. Use edges and value the marginal 12. Creatively use and respond to change	1. Understand your ecosystem 2. Unleash and preserve talents 3. Reinvent gratitude 4. Encourage self-regulation and feedback 5. Renew your team(s) energy 6. Reduce waste 7. Consider the big picture 8. Integrate and think collectively 9. Avoid too much too soon 10. Promote diversity 11. Value interaction and serendipity 12. Be creative and welcome changes

Table 1 The twelve principles of permanagement, mirrored with the twelve principles of permaculture.

Building on the holistic and long-term approach of permaculture, permanagement considers the ecosystem in its entirety and adopts productivity criteria adapted to sustainable development goals in a people-centric organisation. As discussed in the previous section, productivity is key for guiding actions and aligning with the overall objectives. Within the perspective of sustainable development, this means that all externalities of a given activity should be integrated into the productivity evaluation of this activity.

As the fundamental values and core objectives of permanagement, the ethics are aiming at improving the management of businesses and people towards more sustainable, productive, inclusive, and reactive organizations (see Figure 2.

[2] By using the terms « ethics » and « principles » we keep using the terminology defined by permaculture.

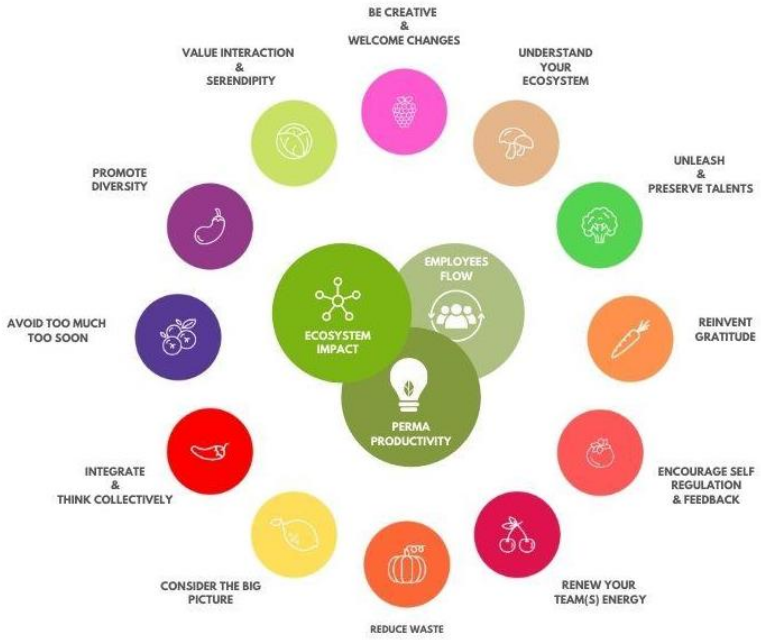

Figure 2 The three ethics and twelve principles of permanagement

The twelve principles constitute a guiding framework for management. Once again, the principles have to be considered in conjunction with the ethics. As in permaculture (we continue with the analogy…), these principles can be used in different ways:

1. Facing a given situation, within an existing business, only some of them may be relevant and applicable directly.
2. When creating a new business, or a new management context, the series of twelve principles can be used as a whole, for guidance.

Thus, permanagement is designed to enable companies and their employees to rethink their relationships to each other and to their ecosystems. The organization with its stakeholders are invited to think beyond profit and the narrow economical scope in order to value and consider additional aspects and impacts of their activities.

Discussion

In this paper, our goal was to build on permaculture to develop the notion of permanagment, using an analogical approach. Analogies and metaphors are powerful tools in science. See for example (Ortony, 1993) for a reflection of the links between metaphors and thought. (Morgan, 1986) is a famous example of the use of images and metaphors in organization studies.

We start from an analogy between nature and the ecosystem of a human activity. Note that the term ecosystem (coined for the first time in 1935 in (Tansley, 1935)) was originally exclusively related to nature. Later, its meaning was extended to business contexts – in relation to nature or not. Therefore, the use of the term in its widest meaning – including interrelated entities whether or not these are connected with nature – is already the result of a metaphoric approach relying on nature as a source of inspiration.

Continuing with our analogy, in the same way as there are several ways of deriving benefits from nature, there are different ways of deriving benefits from an ecosystem. Among the former ones, some agricultural approaches have proven themselves as being very efficient

in the perspective of short-term benefits but catastrophic in the long term. Permaculture is a possible solution for preserving long term efficiency, thus achieving sustainability goals. Among the latter ones – the different ways of deriving benefits from an ecosystem - some management approaches have proven themselves as being efficient in the short term but raise questions and issues over the long run. This is where we close the analogy, by searching for an equivalent of permaculture, in management – thus our proposition of permanagement.

According to Gareth Morgan (Morgan, 1986) “Metaphors create insight. But they also distort. They have strengths but also have limitations. In creating ways of seeing, they create ways of not seeing.” Indeed, permanagement is biased. It is biased towards sustainability. This is an explicit choice, with a clear commitment to design better business and create sustainable value.

Permanagement is a lens to rethink and guide management. The parallel with permaculture is clear, its application to management deserves more attention.

There are three perspectives on management we find meaningful and enlightening when considering permanagement.

First, defining management as "the art of getting things done through people” is allegedly attributed to Mary Parker Follet (often considered as a pioneer in organizational studies). It places people at the heart of management, as well as the achievement of certain tasks. The central role of people echoes the ethic “employee flow”.

Second, closer to us, this definition interestingly is aligned with Peter Drucker stating: “Management is something that relates to human beings. Its task, its duty, is to make people capable of producing a common result, to give efficiency to their abilities, and to make their weak points unimportant” (Drucker, 2001). Beyond people and the achievement of certain tasks as key elements of management, this adds the notion of efficiency. This relates to perma-productivity.

Finally, in (Deslandes, 2014) Ghislain Deslandes presents management as "a vulnerable force, under pressure to achieve results and endowed with the triple power of constraint, imitation and imagination, operating on subjective, interpersonal, institutional and environmental levels.” Rather than defining management, this shows how dynamic, fragile, and systemic it is. It also highlights its connections to people, existing context, innovation and the achievement of some results. Here again we find employee flow and perma-productivity, adding also the consideration of the ecosystem impact. This highlights the interconnection of the three ethics.

Permanagement is not about inventing a brand-new management. It is about giving a new framework for analyzing and designing management practices in the perspective of “better business” and sustainability. Of course, each principle echoes many practices and academic works that already exist in diverse subfields of management. It invites the managers to choose these practices instead of others. We argue that put together, these twelve principles are an easy-to-use and powerful toolbox to guide management.

Conclusion

On the one hand, the permanagement framework is precise enough to fulfill its filtering and orienting roles. On the other hand, it is generic enough to be applied and adapted to specific

subfields of management and to specific situations – for example permanagement applied to digital transformation, permanagement applied to entrepreneurship or permanagement applied to business development and innovation. Once integrated into the organisation's processes, permanagement shapes mental models and may become systemic.

Achieving sustainable development requires sustainable management. By analogy with permaculture, we propose permanagement, a framework guiding the design, selection, and implementation of management practices. It requires being adapted, and contextualized for each relevant field and situation at hand. This opens exciting avenues for research and management practices.

References

Auber, N. (Ed.), 2018. @la recherche du temps - Individus hyperconnectés, société accélérée : tensions et transformations, érès. ed, Sociologie clinique. Toulouse.

Brundtland Commission (United Nations), 1987. Report of the World Commission on Environment and Development.

Deslandes, G., 2014. Management in Xenophon's Philosophy : a Retrospective Analysis. Presented at the 38th Annual Research Conference, Philosophy of Management, Chicago.

Ferguson, R., Lovell, S., 2014. Permaculture for agroecology: Design, movement, practice, and worldview. A review. Agronomy for Sustainable Development 34, 251–274.

Guégan, S., Léger, F., 2015. Case Study Permacultural Organic Market Gardening and Economic Performance - Final Report. AgroParisTech - INRA - SYLVA - SADAPT.

Hemenway, T., 2015. The Permaculture City, Chelsea Green Publishing. ed.

Holmgren, D., 2002. Permaculture—Principles and Pathways beyond Sustainability;, Holmgren Design Services. ed.

Krebs, J., Bach, S., 2018. Permaculture—Scientific Evidence of Principles for the Agroecological Design of Farming Systems. Sustainability 10, 3218. https://doi.org/10.3390/su10093218

Meiller, Y., 2020. Digital transformation, covid-19 crisis, digital transformation. ESCP Impact papers.

Mollison, B., Holmgren, D., 1978. Permaculture One : A Perennial Agricultural System for Human Settlements. Tagari.

Morgan, G., 1986. Images of organization. Sage.

OECD, 2016. Greening productivity measurement - OECD. OECD Publishing, Paris.

Ortony, A. (Ed.), 1993. Metaphor and thought, 2nd ed. ed. Cambridge University Press, Cambridge [England] ; New York, NY, USA.

Tansley, A.G., 1935. The Use and Abuse of Vegetational Concepts and Terms. Ecology 16, 284–307. https://doi.org/10.2307/1930070

Tran, V., 2014. Fatigue émotionnelle, in: Dictionnaire Des Risques Psychosociaux. Seuil.