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## **Rethinking video game design practices thanks to sustainable agricultural principles**

Hélène Sellier

Hello everybody. My name is Hélène, and I'm both a Narrative designer and a researcher in a French indie video game studio called The Seed Crew. I'm happy to participate in the conference and to talk about video game design practices and sustainable agricultural principles.

This inquiry follows artistic research on sustainable art, which aims to not only focus on ecological problems (such as environmental art), but also takes into account the other aspects of sustainability such as social justice and well-being for all living creatures. Following this line of questioning, this paper discusses sustainable creative processes in the video game industry. Because this cultural industry is scarred by crunch and turn-over, discriminations of marginalized people, and standardization of creative practices, imagining sustainable creative processes should not focus on material resources used to design games, but also "human resources" – if we adopt the neo-liberal language of management.

This is an exploratory study which follows previous works on creative practices, including last year presentation for the CGSA, and is based on our collective work in the studio.

This research is thus anchored in the field of research-creation, and more precisely, research-creation in media. This talk is a retelling of creative practices, but instead of focusing on significant event, I am mainly going to use anecdotes to try and grasp the everyday reality of our design processes.

The research-creation methodology invites to fully embrace our subjectivity, and to adopt a reflexive gaze. This is essential for this study since I'm not only studying the creative work I participate in, but also because the theoretical frame of eco-agricultural practices resonates with my personal history as the daughter of an organic activist. Following Haraway's work on situated knowledge, this subjective interpretation of a collective creative experience whose socio-economical and cultural conditions are specific aims to provide insights on achievable transformative practices in a video game studio. In the scope of this study, I don't tackle legal and financial structures. This is an important aspect to be taken into account, however I don't have the theoretical knowledge at the moment to give an adequate analysis on this topic. The research-creation framework also encourages to adopt the point of view of the practitioner, which is slightly different from the point of view of the employee.

This study thus uses principles of sustainable agricultural practices to shed light on design processes in order to explore how creative practices can be sustainable in regard to the preservation of the artists and their creative drive.

A quick warning before diving in. I'm not an expert of eco-agricultural practices. Similarly to auto-theory, I'm using existing theoretical frameworks in order to understand my own experiences. So, I might simplify some concepts, but the schematization is precisely what allows making sense of creative practices. There are many theoretical frameworks on sustainable agricultural practices, such as natural farming or "do-nothing farming" conceived by Masanobu Fukuoka. But I decided to focus on permaculture. More precisely, I draw on the foundational works of Bill Mollison and David Holmgren and more recent analysis of

Laura Centemeri. This choice doesn't imply permaculture as an absolute model, and there are numerous contradictions inside the movement (such as the one between a technological approach and a political one) as well as a lot of practical critiques of this framework (such as the need for wide spaces for an autosufficient system).

However, using permaculture to understand creative practices has two main benefits. Firstly, it's a popular concept, which means that it might be a concept relatively easy to grok and use. To understand the prosperity of the concept outside agriculture, see for example the book *La Permaentreprise*. Secondly, according to Laura Centemeri, permaculture should be contextualized in the cultural turn of design thinking in the sixties and seventies. Since permaculture is a design practice, it has common points with creative practices in video game studios, which are often labelled design.

One of the success factor of the permaculture framework is maybe its presentation through clear principles. There are three main ethical principles, which were defined by Mollison and then Holmgren : earth care, people care, fair share.

Those principles are linked with actionable items in Mollison's theory. Such as "work with nature rather than against".

And conceptions rules in Holmgren's book.

I won't use these precepts as a strict guideline to understand how they could be applied to video game creation, but rather draw upon their interpretation by Laura Centemeri in order to retain essential ideas of the permaculture movement which help to conceptualize two aspects of creative practices in our studio : the connection between the practitioners and the object created and the interpersonal relationships.

### **I Connection between the practitioners and the object**

So, first of all, permaculture understandings of regeneration and durability of a designed system are helpful to think about how can we build a sustainable connection between the practitioners and the object of their work.

#### **Work with (nature) rather than against**

One of the main principle of permaculture is "work with nature rather than against". Working with different people, temporal constraints, material limitations, etc in the making of one coherent object is something that we try to do. Recently, when designing a new game, we came across a difference of perspective between the game design and the narrative design. The conflictual discussions were resolved when we managed to see each point of view not as a field to conquer, but as an existing element to take into account – even if this meant drastically changing how we imagined the game until then.

#### **Use sustainable resources and methods**

Permaculture is also based on the idea to use sustainable resources and services. For us, it means not only question which equipment to use, but also to try not to tackle the same problems again and again in the creative process. We are trying to build work methods and tools which can be reused from one project to another. That's the line of reasoning we use in our decision of softwares, for example. Whilst finding ways to save time is mainly a way to

save money in a capitalist system, it's also a way to ensure that we have the opportunity to work on new elements.

### **Value waste**

In permaculture, waste can be used to nourish another living element. In a video game studio in which much of the work is cut from the final version of the game, insisting of reusing already crafted elements to create other projects is maybe an economical imperative but also an opportunity to give a special value to individual work. In the studio, we try not to assume that features in games which are cut in the final version or projects which were set aside were “work done for nothing”, but rather as a living substance that nourishes future creations. For example, a scientific paper on AI in video games which is not published, a small game made with AI characters in a game jam gave birth to a game using robotic figures.

### **Make the least change for the greatest possible effect**

In permaculture, you try to “make the least change for the greatest possible effect”. This principle is close to how we decide what projects we work on. Opportunities and collaborations largely determine our work : projects grow and flourish as they need. Some of them don't prosper, but we don't maintain them at any cost and at the risk of smothering more promising projects. For example, after spending a lot of time on the narrative and game design of an interactive fiction, we decided not to continue the work on the project since the collaboration with another studio progressively died out.

### **Use rotation and association**

In permaculture, you often use crop rotation and association of different plants. In the same way, we try to work on very different projects. For example, we made a game on discriminations for in-company training, a game on disability and ableism for young students, and we are creating a deckbuilder for the general public. We are also moderating workshops and cultural events, teaching, consulting on different research projects, etc. This is not a string of random developments, but rather a conscious rotation in activities in order to keep a fertile creative ground.

### **Each element performs many functions**

#### **Each important function is supported by many elements**

Another way to look at this principle of rotation and association in our studio is to focus on the tasks people are doing. We don't have a single speciality. I do research and creation. Someone else do game design and programming. Someone else do art and user test. Someone else do programming and design. It's very common for people in an indie studio to have several roles, however what might be interesting is to consider that not as a difficulty, but rather a positive opportunity - which is opposed to the hyper-specialisation that we can notice in the industry. This relates to the permaculture principles that “each element performs many functions” and “each important function is supported by many elements”.

### **Change our representation of utility**

All the permaculture precepts previously mentioned call into question our representation of utilitarian rationality. We value things which seem not to be productive right now, but have an effect on the whole system of our work processes. For example, talking about permaculture and creative practices at a conference. ;)

### **Autoregulation**

The ideal of a permaculture system is that it is autoregulated. In the same way, we try to decide as much as possible for ourselves (individually and collectively) what we work on and how. That's how we came up with the decision to create a deckbuilder for the general public rather than another game for serious purposes.

### **Decisions : “good enough for now” + “safe enough to try”**

In most permaculture organizations, the decision is not definitive and is often reviewed. The decision is not made by majority or by consensus, but rather if there is no grounded objection. The “good enough for now” and the “safe enough to try” maxims are used both in permaculture and in our studio. For example, we first decided RecovR would be a serial games with thirty episodes by modules, however this decision was amended after the first tests.

### **Cooperation within the community rather than self-sufficiency**

In permaculture, autoregulation doesn't mean no exchange and an inward-looking attitude, but rather means that you need to develop cooperation within a community. In the same way, the fact that the impacts of our work tasks and processes are decided internally doesn't mean that we are cut from collaboration with other legal entities and people. For example, our games are often reviewed by external experts, but those people are not random, they share our values and are part of our community.

### **II Interpersonal relationships**

Secondly, permaculture principles allow understanding how to nurture the interpersonal relationship in collaborative creative practices. Following Laura Centemer's distinction, I propose to understand the management of co-worker relationships as a design of a milieu. Contrary to the design of an environment which envisions the ecological crisis as a technical problem of adapting the environment to the human needs, the design of a milieu, focuses on mutual adjustment between a being and its context.

### **Focus on the interdependence between beings**

This approach means to consider the interdependence between beings. In the composition of a video game studio, it seems logical to focus on complementary professional skills (programming, game design, art...), but the interdependence is not only on this level. Understanding a team through the prism of interdependence means to focus on everyday behaviors, to observe how we help and bother each other. For example, who is listening to the discontent of whom.

### **Use and value diversity**

The permaculture stance on diversity, emphasizing its importance for a sustainable system, resonates with contemporary advocacy for inclusion in the workplace. In the studio, we try to adapt our work methods to the individual needs of each person. For example, when speaking is difficult for me, I participate in the meeting at a distance and by writing.

### **Integrate rather than separate**

In permaculture, not only you value diverse plant species, but you try not to separate them from each other. In the studio, we try to create common ground between disciplines which are not obviously linked, for example research and marketing.

### **Understand that there is mutual adjustment between a being and its milieu**

In permaculture, one main principle is that everything works both ways. An element has an effect on its environment and, reciprocally, an environment influences this element. In the studio, we try to respect each other identities and individual needs, but we also are aware that our workspace has an effect on us. Someone in the team told us one day that working here help them make sense of social interactions, but in the other way, their experiences enrich everybody's understanding of our society.

### **Everything gardens**

Because everything has an impact on the milieu, and not only on the element obviously affected by it, we are very careful on how someone is integrated to the team in the long run. Discussing about the addition of a new team member is a current work practice, but what we do is opening the discussion to every member of the team, and not only the persons who will work with the new hire.

### **Observing patterns**

In permaculture, observing patterns means examining an organizing principle which is specific to a context. Like I am doing today, we think a lot about our particular ways of organizing our work. This reflexive gaze on our practice is not only formal. In everyday conversations, you can for example hear about how this person expresses their frustration loudly, whereas this person doesn't utter a word. There is no judgment in these observations, but rather an explication of how we individually and collectively.

### **Choose care and accept dissonance**

Permaculture principles of "earth care" and "people care" refer to a more general ethic of care. However, as Laura Centemeri notices, this attention to other beings, human and non-human, doesn't mean that there are no "tragical choices", such as sacrificing an object valued or the interests of someone close. The researcher explains that the ethics of care in permaculture encourage thinking about the implications of our actions. In permaculture, dissonances are part of the interactions in the system and nature is not conceived as evenly harmonious. This argument is very helpful to understand our teamwork because I don't want to give the impression that there are no tensions or conflicts or frustrations. We know the work conditions are not adequate for everybody (in terms of salary, location, for example), but we know that this framework is "good enough for now" and that we need to try to maintain this balance.

### **Conclusion**

In permaculture, there is no absolute method. On the contrary, the observation of the context and its patterns are the first rule to conceive a sustainable system. So, everything that I have said is not a to-do list which could work in each studio. However, what we can maybe remember is that to preserve personal and collective creative drive, rather than set up large interventions in the work processes, it might be important to let the interactions between the practitioners and their objects as well as between the practitioners themselves unfold on

their own, taking the least possible action and making adjustments only after careful observation.

**I hope you found some of my ramblings interesting. Thank you for your attention.**