

---

# Using Art as an insight to identify ethical and sustainable issues (workshop)

## **Jeanne Bloch**

Independent choreographer-artist,  
sustainability specialist  
Jeanne@contemporaryhope.dance

## **Céline Verchère**

Sociologist, CNRS, UMI LN2  
University of Sherbrooke, Canada  
[celine.verchere@usherbrooke.ca](mailto:celine.verchere@usherbrooke.ca)

Paste the appropriate copyright/license statement here. ACM now supports three different publication options:

- ACM copyright: ACM holds the copyright on the work. This is the historical approach.
- License: The author(s) retain copyright, but ACM receives an exclusive publication license.
- Open Access: The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

This text field is large enough to hold the appropriate release statement assuming it is single-spaced in Verdana 7 point font. Please do not change the size of this text box.

Each submission will be assigned a unique DOI string to be included here.

## **Abstract**

How to better take into account ethical and sustainability issues in technological innovation and "food culture"? In our opinion, artistic practice is a powerful tool to examine ethical and sustainability dimensions of technological developments. By working with "the collective unconscious" and using a sensitive approach, the artist questions technological developments' nature and very meaning and therefore appeals to deep user's motivations. Through this workshop, based on a survey-type experimentation derived from the performance "*The Temple Had Oblique Windows*", we indicate how "food" and "lighting" concepts have been fashioned from both an artistic and sustainable innovation perspective. We expose how the confrontation with a panel of users produced complementary results to Ux approaches on innovations "social frameworks of comprehension".

## **Author Keywords**

Art-based innovation; human food interaction; digital food culture; food design; sustainability; wearables; low emission lights; light pollution; climate change; dance, movement, choreography, visual art



Figure 1: Light & dance T-shirt  
Photo: ©Jeanne Bloch

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g.,

## Introduction

Knowledge specialization has resulted in a divide between so-called "scientific" and "artistic" research. Often, there is even a top-down authority relationship between the two, with hard sciences and engineering knowledge holding the upper hand.

Innovation based economy relies mainly on technological knowledge - with sometimes the help of human sciences to uphold the process - in order to validate technological developments' design and systems' compliance.

Occasionally, the artistic approach is associated to technological developments but mainly as a communication tool.

We suggest taking the opposite view: through this project, we stand for the idea that the artist is a "transmitter of significance" even more than the designer and the technologist. The artist talks about our unfolding world while incorporating his own subjectivity and vision. As a result, he helps us imagining our future.

In the specific case of this workshop, the artist underlying considerations relate to sustainability in general and specifically to: light pollution, low-emission lights and tech-nature relationship through veggies interactions.

In our view, the materialization of the artist's vision through works of art and furthermore, through interactive devices, help: 1/ taking into account non-mobilized features in mainstream innovation methodologies; 2/ creating a qualitative dialogue with users and designers to produce subtle sustainable innovation indications.

Indeed, the artistic installation helps create a dialogue with participants about the artist' intentions, displays (here the interactive installation) and related concepts.

## The workshop

One part of the proposed workshop consists in manipulating "instrumented" veggies displayed on a table placed in an obscure room. This particular context of manipulation (dark room, lighting effects) generates a series of reactions that are discussed with the workshop participants. The artist's intentions and research work and the participants' expectations and perceptions are reviewed afterward.

This workshop refers to two past experiments led in France with a similar installation ("La Cité des Sciences' Carrefour Numérique department", Paris and "Le Shadok," a public art and tech center in Strasbourg).

## The installation : food tech prototype

The installation, which features interactive fruits and vegetables that light up in different ways when you touch them, has been created as part of Jeanne Bloch's dance performance, *The Temple Had Oblique*



Figure 2: Cité des Sciences, Paris.  
Photo: ©Anne Charignon

*Windows*<sup>1</sup>. Its choreography includes dance movements based on veggies cutting and peeling gestures. Jeanne Bloch looked at these gestures for their dramaturgic meaning. She considers them universal in two ways: historically (through time) and geographically (through culture). Regardless of times and cultures, humans have peeled and cut fruits and vegetables.

The light-veggies installation<sup>2</sup> includes 1 Adafruit NeoPixel Jewel 7 x 5050 RGB LED and one Adafruit NeoPixel Stick 8 x 5050 RGB LED. Each group of LEDs is carved in a different fruit or vegetable after being protected from veggies juice with a thermo-plastic envelop. In addition, a computer interface control the lighting display (colors variation and intensity). At this day, we use cables to connect veggies to capacitive sensors and micro-controller. Though, a wireless version is in preparation.

Before stepping into the dark room, the participant is invited to put on a luminous T-shirt helping the group to see the installation in the dark. The T-shirt includes one or two 5mm LED (blue or red or white) and some reflective and diffusing fabrics

The luminous T-shirts have been developed during a previous dance/light artistic research run by Jeanne Bloch..

---

<sup>1</sup> The Temple Had Oblique Windows premiere will be featured in Paris, November 2018.

<sup>2</sup> Developed with Jonathan Perret, software developer and performer.

<https://vimeo.com/88577018>

### **Key issues for discussions**

- Working hypothesis and assumptions (art as a resource to produce responsible and user-centric innovation; Dance and Movement as Manipulation Tools; Performance-Based Design, etc.)
- First results and analysis returns (At a methodological level, in terms of innovation outcomes, and valuable insights for the artist, etc.)

### **Acknowledgements**

We thank the French institute CNRS / UMI LN2 for his support.

**For further details :** <http://contemporaryhope.dance>

### **References**

1. Leavy, Patricia, *Method Meets Art: Arts-Based Research Practice*, Guilford Publications, (2009)
2. Snowber, Celeste, *Embodied Inquiry: Writing, Living and Being through the Body*. The Rotterdam, The Netherlands: Sense Publishers, (2016)
3. Dielman, Hans, (2015), *Transdisciplinary Hermeneutics; Working From the Inner Self, Creating Ecologies of Knowing*, *Transdisciplinary Journal of Engineering & Science*, ISSN: 1949-0569 online, c 2015 TheATLAS, (2015)