Internet of Artefacts

Nature(s) Morte(s), Live Data

Abstract. This research develops the notion of the art object and consequently, the art experience, in a reality of smart, connected objects. How can our art objects remain dumb and deaf in a culture of smart communications, where the air is rife with data streams passing to and fro? How can our art objects relate to this paradigm change? The IoT is defined by some as "Things having identities and virtual personalities". Conceptually, is it mainly about the emergence of new identities for objects?

Introduction

"Nature(s) More(S), live data" is a multidisciplinary and innovative research regarding the possible spaces of the art object in a connected universe - the universe of the Internet of Things. Objects have been part of Western pictorial tradition since antiquity. But it is in the sixteenth century that the representation of the inanimate object becomes autonomous and constitutes a separate genre. As with any everyday object, such as the toaster or the fridge, it is not enough just to implant a sensor on the object, and connect it to the network. It is rather a question of articulating the context of the connection, of creating the network to which the object is connected, of understanding the new functions of this object, and of redefining our experience of the object of art which, will now be part our connected universe. The art object thus assumes a position more suited to a culture defined by the permanent connection. This pilot project serves as an example and reflection on the possibilities of the art object in a network society.

1 - Purpose of the research and its importance to the field

The Internet of Things (IoT for brevity), by its definition connects devices such as everyday consumer objects and industrial equipment onto the network, enabling information gathering and management of these devices via software to increase efficiency, enable new services, achieve health, safety, or environmental benefits. By 2016 not only will 75 percent of the world's population have access to the internet. So will some 10 billion devices. dramatic decrease in the cost of sensors, processing power and bandwidth to connect devices are enabling ubiquitous connections right now. Early simple products like fitness trackers and thermostats are already gaining traction. The emergence of a global system of interconnected computer networks, sensors, and devices all using the internet holds so much potential to change our lives that it is often referred to as the internet's next generation.

1.1 - New societal issues

This new culture of connected objects inevitably raises questions on a multitude of societal themes. Ownership, privacy, and security immediately come to mind. We already have an example of what is implied in owning a connected object: our smartphone. The physical object of the phone is the center of an ecosystem that (literally) spans the Earth and goes on up to low-earth orbit, where GPS satellites float in space and help companies pinpoint devices on Earth. To make calls or send text messages, one must have a contract with a provider of service. "Owning" a phone is a complex contract between the user, the service provider, and the different applications the user choses to install. According to the IoT vision of the major tech companies, not only our relationship to objects will undergo fundamental transformation, but our model of ownership will undergo fundamental transformation as well.

1.2 - The role and position of the art object in a connected universe

A lot of thought is being put into imagining and creating scenarios for the impact of the IoT on almost every possible industry, very little thought has been given on its possible impact on our cultural heritage, past and future, namely, our objects of art. The story of mankind is inscribed in its artefacts, long before the invention of writing, and subsequently, history. Our (so far) silent objects record and tell the stories of culture over the centuries. To paraphrase Paul Klee, how will our unconnected artefacts make us see our connected culture? How will the connected generations relate the story of man through unconnected objects?

2 - Brief survey of background and of related work

Several artists have been working with the notion of connected objects for a few decades already. In recent years some artists are starting to explore the uncharted territory of networked objects. For this paper I will describe a couple of prominent examples I find particularly interesting.

Designer Simone Rebaudengo was among the first to critically reflect on the implications objects which form their own social network. technology. In his master's thesis "Addicted Products" : he imagines "... a real fictional service that questions the model of constant ownership and proposes a scenario in which a product can be shared without the active decision of a person, but based on its own needs as a product."(Rebaudengo, 2013)

In the short mocumentary he created as part of his work, he raises some critical questions regarding the changing notion of ownership, the way humans may be perceived by their objects, and draws inspiration from recent stories about electronic appliances which allegedly committed "suicide".

On the other side, French artist Albertine Meunier, who was recently nominated as

chevalier de la legion d'honneur, creates connected objects rather in the Dadaist tradition. In her work she suggests several approaches to represent big data, personal data, and the algorithms that are at the core of contemporary life. She uses the internet and its data as raw material for artistic creation. Her work consists in a rematerialization of data. As part of this appraoch she creates objects that are connected in some way with online data. One such example is "Ma data est une poule aux oeufs d'or" She connected a toy chicken, which produces a golden egg every time the rate of eggs at the Rungis market drops below a certain limit …

3 - Description of proposed approach

This research is developed around 3 major axes: artistic, historical, and technological.

Technology: At this day and age it is impossible to disassociate contemporary culture from technological developments. The research kicks off with an investigation and analysis of the technological breakthroughs, the economical conditions, and the sociological shifts which all together combined to bring forth this transformation. Simple objects associated with powerful platforms are thus transformed into a global experience, offering to their user / owner a complete service perfectly adapted to their individual needs.

Art historical: From 17th century still life tradition, to the liberation of the object by the surrealist, and the reign of everyday objects in Pop Art and the sculpture object of the Minimalists, the object in art has come a long way from its neglected, overlooked position in antiquity. It is very revealing to examine the upcoming transformation of the art object in view of the numerous transformations it underwent throughout art history.

Artistic: Among the multitude of innovative scenarios that all describe our daily life in a connected world, very little, if any, reveals the complex challenge of integrating art objects into a connected reality. Many questions arise concerning the reality of this near future and among them some question the very role of the art object in contemporary society. How can we as artists, respond to this new cult of the "Smart"?

4 - Expected contributions

Due to its interdisciplinary and over reaching subject this research would greatly benefit if it were to be discussed in a pluridisciplinary forum, in an artistic and cultural context. There are several issues concerning the political, social and cultural role of technology in the contemporary art scene and contemporary culture in general which should be addressed from several angles.

5 - Progress towards goals

The research has so far produced two international conferences, and a double exhibition. Now comes the time to tie all this research together, analyse its findings, draw conclusions, and make it part of the evolving history of art, technology and society.