**Creation, Creativity and Working Collectively**

Hola a todos de nuevo.

Cómo dije ayer voy a dar la charla en inglés. No obstante, me podéis hacer las preguntas o hacer comentarios en castellano después. Bueno.

Thank you for coming.

As you probably know, there are several members  in  our group... theoretical physicists, a programmer with a scientific background and an artist. I’m the Artist.

The perspective I offer will be a little different from those expressed yesterday. I enjoyed the talks yesterday and having worked with Bartolo for some time on this project, I was quite familiar with some of the collective behaviour models presented.

Partly in response to what I heard, I’m going to make some propositions and ask some questions, perhaps rather than answer them in the good old tradition of the artist.

I’d like to start by talking about creativity.

**Proposition 1:**

**SLIDE 01: Creation is both a collective and individual affair.**

**Creation,** taken as a whole, is a collective affair in which all participants, whether collaborators or competitors, are agents in the formation of new interconnected assemblages of meaning, knowledge or sensation. The last term, sensation, is particularly relevant to art.

But before we begin, and to contextualize, I should point out that there are assemblages of many types beyond what we might normally define as the creative world; for example, the corporate and political worlds, the stock exchange etc. By assemblage, I refer to all those who interact with the markets in some way. By the same token, the artworld is also an assemblage in which the curators, collectors, public and private sector, as well as artists, are all agents.

Our understanding of such assemblages and how they are formed can help us predict and map the emergence of trends and shared behaviours across many more areas of human endeavour and activity. Analysis of such assemblages can, for example, also help us understand how power is wielded; how corporations, political organisations and international institutions operate and how corruption works.

And coming back to the art world for a second, the current dominant trend of Conceptual Art in European, American and Asian public museums can be explained, to some extent and for good or bad, as the outcome of the interactions between historians, theoreticians, critics, curators, art school professionals and artists and the ‘authorisation processes’ required to acquire individual or institutional state funding. There’s some connection here with what David was saying yesterday about record sales being attributable to record companies throwing their economic weight behind particular artists.

**Proposition 2:**

**SLIDE 02: Creativity is both a collective and individual affair.**

If **creation** is the formation of new interconnected assemblages of meaning, knowledge or sensation, **creativity**, with regard to verbal language and art, could be described as the process of formation of novel articulations between content and expression within and between these assemblages. And the creativity of a particular expression could be considered its propensity to encourage further atypical expressions and its potential to generate new ‘content-expression’ articulations i.e. its potential to force language into a state of flux and intensity (Influenced by Gilles Deleuze).

**Creativity** is therefore both collective and individual:

The artist is part of a collective, if we think of art as a whole, even when he or she works on his or her own and does not think about how their work relates in some way to that of their peers. Individual creators have always been part of a collective provided they have had some kind of contact with other artists’ work or have exhibited publicly,  **thus influencing others and what they do**. This is part of how trends emerge. It is important to remember that creation is never about starting from zero.

Creativity is also individual in the sense that if the aim of an artist is to produce a singular expression, and I think it is, then the processes and experiences involved in doing so are personal. By the same token, however, artists working in a collective might also seek to produce a singular or number of singular expressions together, raising the questions of whether cooperation and competition can act as motors for innovation.

**This is what we will be looking at in the post-experimental analysis of Riverrun3’s collective writing experiments.**

In any case, if an artist meekly follows given channels of transmission, they can only ever be an expression of the pre-existing system and there is little creativity in that. The enemy of art thus becomes any kind of representation which restricts the viewer to the limitations of an experience constrained by established habits of perception and enfeebled by the deadening impact of stale cliché. It is, incidentally, in this sense that a collective creative project requires leaders, or to put it a better way, creative innovators.

Deleuze and Guattari thought of an artwork as an individual expression and singular event in interaction with the world around. It is for this reason that they proposed the Australian Tooth-billed Bowerbird (*Scenopoetes dentirostris)* as an example of a complete artist:

**PUT ON BOWERBIRD VIDEO (01:15):**

This is how they describe the Bowerbird’s behaviour:

"Every morning the *Scenopoetes dentirostris*, a bird of the Australian rain forests, cuts leaves, makes them fall to the ground, and turns them over so that the paler, internal side contrasts with the earth. In this way it constructs a stage for itself like a ready-made; and directly above, on a creeper or a branch, while fluffing out the feathers beneath its beak to reveal their yellow roots, it sings a complex song made up from its own notes and, at intervals, those of other birds that it imitates: it is a complete artist (What is Philosophy?, 183-184)."

For the Bowerbird, I would add, the purpose of **communication here** is not to depict the real but to communicate. It is not about describing a relationship with the real but about relationships with other people (Simulation and Social Theory, 149). This is, after all, a mating ritual.

There is also the question of the aesthetic atmosphere the Bowerbird creates in a given physical space. Creativity, from an artist’s perspective, is also a reconfiguring of aesthesis (This was Walter Benjamin’s view regarding photography). Creativity is a process which seeks to re-set the frame of sense experience. Gernot Böhme, physicist and philosopher, talks in a similar vein of pro-actively ‘making atmospheres.’ This is of particular relevance to our project Riverrun3, given that it is about the design of an online platform and visualisation system for online collective writing experiments, or performances, which are to be projected live in physical space.

**Bearing what I have just said in mind, I’d like you to think for a moment about what we might make of this:**

**PUT ON CÉLESTE VIDEO (01:15).**

This work by Céleste Boursier-Mougenot is an installation of electric guitars and zebra finches at London's Barbican Curve gallery, 23 February – 23 May 2010. “An aviary in which the public is invited to enter and mix with the finches whose activities generate a live musical piece - each construction should be considered as a unique piece, living and ephemeral, determined by the givens of its situation and linked to the circumstances of its present.”

It would seem to raises questions of creative intention and artistic skill and craft. Who is the artist? Can the birds be considered creative agents?

And bearing that in mind, how does that work relate to this one, by the same artist?

**PUT ON CÉLESTE INDEX (4) VIDEO (01:15).**

In earlier versions of this project, the text was supplied by computer keyboards in the vicinity: the typing of museum staff, patrons at an internet café, etc. The software was designed to analyse the activity carried out on the computer keyboard, in order to extract from it the elements of a score and transmit them in the form of "Midi code" to an acoustic piano which played them live. For another exhibition, the piano score was a translation of stock market data from business news and financial information websites.

**A:** **This takes us onto thinking about Creativity and Working Collectively**

**Working in collaborative groups has potential rewards:**

The sum may be greater than the parts i.e. the result may even be better than the most capable member of the team would be capable of working on his or her own.

Here I’d like to make an observation:

Group projects involving multiple goals and a broader range of participants are more speculative and unpredictable but they can often bring more varied concepts and more innovative articulations onto the same plane. i.e. They can be highly creative. This is just one reason why spaces like Medialab-Prado are very important.

There are scores of collaborations in which collaborators from diverse fields have worked together to produce something far richer than each would have been capable of producing on their own. I would like to present just one example, an artwork, naturally, by Finnish/English Glasgow-based visual artist Hanna Tuulikki who worked with visual artists, musicians, textile artists, dancers, writers, sound recordists, ornithologists, conservationists and anthropologists to produce “Away with the Birds” a body of work exploring the mimesis of birds in Gaelic song. **(Have you noticed a bird theme yet?)** In the summer of 2014 it becomes a sited performance and installation, made for the Isle of Canna. Incidentally, the singing is in Scottish Gaelic:

**PUT ON HANNA AWAY WITH THE BIRDS TASTER VIDEO (01:15):**

As I’m sure we all know, collaborations between artists and scientists have become much more common in recent years. Ariane Koek, who set up the artists’ residency at CERN, has stated artists need to be wary of certain traps in such collaborations:

1. They should avoid becoming a communicator of science.
2. Scientific methods, experimentation and technologies should not be a means of production.
3. They should not present Science as art.

Instead, artists should seek an interaction between art and science which allows each discipline to be honoured for both their differences and similarities.

Our project, Riverrun3, whose earlier versions were developed by an artist, a theoretical physicist and a multi-faceted programmer, and selected for *Interactivos,* hopefully does that.

I believe it is possible for collaborations to not only honour such differences and similarities but also to accommodate them within the same project well if parallel artistic and scientific processes are conceptualised, explained and put into action at the outset. i.e. the same collaboration can consist of a range of working processes and outcomes relevant to both the creative fields of art and science.

This requires **more** of the scientific and artistic collaborators than just a shared interest in the same theme. They must also be willing to discuss different perspectives and work together to achieve different aims or expectations with regard to outcomes or creative process. This creates the conditions for a more interesting kind of creative oscillation as they exchange knowledge and get to know how each other thinks and works. In these ways, such projects take on board a broader idea of what ‘success’ might mean.

**SLIDE:** In *Negotiations*, Deleuze describes philosophy, art and science “as separate melodic lines in constant interplay with one another [(](http://en.wikipedia.org/wiki/Gilles_Deleuze#cite_note-24)Negotiations, 125)[[1]](#footnote-1).” Such interplay, they say, not only reveals “unexpected convergences” but also suggests that there are always “new implications and new directions” (Negotiations, 30)[[2]](#footnote-2) for artists, scientists, philosophers and others to explore.

I hope that serves as a kind of further introduction to Riverrun3 presented yesterday, a project conceived by an artist and a theoretical physicist. Our starting point in the project was a shared interest in collective creativity. This developed into a series of conversations about how we might work together. This required quite a number of knowledge-sharing sessions. The result, to be brief, is both a real-time artwork and a scientific observation and data-gathering tool. Neither the art nor the science has been compromised for the sake of the other.

There may be disagreements and much convincing to be done in such collaborations, but the individuality and specific skills and qualities of each creator in such creative scenarios is not questioned. There is, however, a reciprocal transfer of knowledge as each influences the other (Incidentally, I was even familiar with some of the modelling examples presented yesterday). And finally, working in such a way also raises awareness that the creative process is not always linear.

It should be repeated that there are issues still to be resolved with Riverrun2, as we explained yesterday, and we are here because we believe these can be resolved more effectively here in Medialab-Prado in a workshop environment. New ideas and suggestions will undoubtedly emerge and be implemented as we go along.

**But as we are here to take a talk about creativity, specifically collective creativity,** here once again is the example I showed yesterday from an early Riverrun2 trial experiment:

**PUT ON VIDEO OF RIVERRUN 2 (05:25)**

**As it plays talk through it:**

For each *Riverrun* experiment:

a. The range of visibility for each maker/local viewer is set manually or automatically. b. The random position of writers is always known to "behind-the scenes" administrators.c. Its status as a circular or conventional text writing experiment is set beforehand. d. The total number of makers/local viewers is always known, even if it changes.

**As he knows these values, Bartolo Luque will be able to quantify the range of possible direct and indirect influences on each maker/local viewer**.

**In this trial there were 20 Writers and there was a Radius of Visibility of 1**

Bartolo Luque’s thesis, based on earlier mathematical studies and physical models of complexity and self-organisation is that a phase transition will occur in *Riverrun* at a certain radius of visibility relative to the total number of makers/local viewers.

Here, incidentally, it’s interesting to note that Deleuze and Guattari’s writings, on philosophy and art and their function, and on the singular conditions for novelty in creative expression, repeatedly reference nonlinear dynamics, chaos theory and complexity theory.

And me. Well. I’m an artist. I am interested in **CREATIVITY AND EXPRESSION AND THE CREATION OF ATMOSPHERE.**

I’ll come back to the first of those in a minute. You can ask me questions later about the second, if you like.

But first I’d like to say something about learning:

**SLIDE Learning is both a solitary and social affair**

Learning is collective and individual, the result of interaction and individual experience and circumstance. As I have said above about working collectively, in the course of any interaction there exists the potential for a transfer of knowledge. But that is not to say that when we are learning on our own, we are learning in isolation. We all live in certain social, political, cultural and linguistic environments in which there exist certain codes (some of which we might challenge, of course). .We learn when we interact **and** when we are on our own. Our experiences as we do so, however, are always individual and untransferable.

As biologist Humberto Maturana argues at the very beginning of his 1995 book *La Realidad: ¿Objetiva o Construida?: I.Fundamentos Biológicos de la Realidad*[[3]](#footnote-3), “Human beings are social beings: our everyday lives are experienced as a continuous interweaving with the existence of others. This in general terms, we admit without reservations. At the same time, human beings are individuals: our everyday existence unfolds as a continuous process of individual, untransferable experiences. We consider this unavoidable.”

Similarly, philosopher Francis Jacques emphasises the importance of the effects of interpersonal dialogue on the formation of the subject (Difference and subjectivity: dialogue and personal identity) and rejects approaches which address subjectivity purely in terms of individual consciousness. We are above all social beings, as Yamir reiterated yesterday.

But as Maturana says, we must bear in mind that every convergence around culture or conditioning is also characterised by difference on the grounds that experience within space and time is itself individuating (See Maturana)[[4]](#footnote-4). Thus, while each individual is to some extent the product of, social interaction, each also has uniqueness. And while a communicative impulse towards the objective may help us establish common ground, we can nevertheless, as sociologist Niklas Luhmann observes, “find ourselves in the position of individuals who can neither perceive or think in the other, nor produce operations that could be recognised as those of another rather than our own (Art as a Social System, 12)[[5]](#footnote-5).”

The individual learns as it interacts with the world and constructs subjective models of it. Cognitive science links together linguistics, neurobiology, psychology and information theory to produce a concept of the mind as a biological organ characterised by its ability to create models of its world (Simulation and Social Theory, 23-24)[[6]](#footnote-6).”

With specific regard to language learning and use, Chomsky, the linguist, argues that while the human being has an innate capacity for language they learn to use it within the context of the language spoken around them. Language is not simply a set pattern of responses reproduced through repetition (Chomsky 1957, 1965, 1972). (Simulation and Social Theory, 23-24) [[7]](#footnote-7)

**SLIDE:** So what about **VERBAL CREATIVITY AND EXPRESSION?**

When is verbal language creative? It is so when it ceases to be merely functional in a conventional sense, when it avoids clichés and dead metaphors, when it no longer follows given channels of transmission, (here there is a connection with Sergi’s questioning of commercial pop yesterday) when it is no longer merely an expression of a pre-existing system or simply representing corresponding content. (See Deleuze, A Thousand Plateaus, 86).

In brief, and forgive me if I repeat myself;

**…creativity**, with regard to verbal language and art, could be described as the process of formation of novel articulations between content and expression. And the creativity of a particular expression could be considered its propensity to encourage further atypical expressions and its potential to generate new ‘content-expression’ articulations i.e. its potential to force language into a state of flux and intensity (Deleuze).

It will be interesting to see how things go with Interactivos and the collective writing experiments.

Thank You.

1. Insert bibliographical reference [↑](#footnote-ref-1)
2. Insert bibliographical reference [↑](#footnote-ref-2)
3. An English-language translation of this book does not seem to have been published. Its title translates as: *Reality: Objective or Constructed? I. Biological Principles of Reality*. It accompanied another publication: *La realidad: ¿objetiva o construida? II: Fundamentos biológicos del conocimiento (Reality: Objective or Constructed? II. Biological Principles of Knowledge)* Insert bibliographical reference [↑](#footnote-ref-3)
4. Insert bibliographical reference [↑](#footnote-ref-4)
5. Insert bibliographical reference [↑](#footnote-ref-5)
6. Insert bibliographical reference [↑](#footnote-ref-6)
7. Insert bibliographical reference [↑](#footnote-ref-7)