Learning strategies based on workshops have a long tradition in the design domain for the educational advantages they offer. Their formula allows individuals and groups to learn through practice, developing capabilities and fine-tuning skills which are based on personal strengths and needs. Workshops also provide an educational framework that nurtures the collaborative development of prototypes pivoting on the quality, richness and intensity of the process itself. Finally, they are convivial tools allowing participants to break, at least temporarily, inertia and routine, favouring the exploration of alternative ways and paces of thinking and doing.

In the event of the Tenerife 2017 conference, the 2CO organizing committee decided to enhance the program through a series of intensive design workshops addressed to professionals, young researchers and students. A way to start an exploration on the didactic issues associated with communicating complexity, and a strategy for warming up the program, fostering the student’s engagement. The 2CO workshops took place on 21-22 November, immediately before the beginning of the conference.

A workshop lead by the NYC-based keynote speaker Kelli Anderson also took place as final, farewell event, offering its participants a practical workshop, about creating a personal pinhole camera-book from cardboard. A cozy, moment of relax after the busy conference days.

Three distinct set of workshops took place:

- the 2CO workshops _educational explorations_ lead by the 2CO core community;
- the professional workshops _learning opportunities_ mainly directed to local professionals;
- the educational workshops _a series of workshop_ directed to local and visiting students.
1. 2CO workshops.
16 h in 2 sessions of 8 h/day

1.1. Processing complexity. How to design great information graphics
Lead by Alfredo Calosci and Lisa Borgenheimer (who replaced Michael Stoll)
Information graphics, is not just about “illustration”, rather it involves a set of “rules” that produces a final result.
Code may be used at different stages of the process starting from the data mining and until the final rendering.
During this workshop, discussions about the making of “dataViz”, and a short “hands-on” session on creative coding with Processing were carried out.

1.2. In-camera simplicity. Animation basics for data presentation
Lead by Nicolò Ceccarelli and Eleni Tsampra
The workshop, that has since the Tenerife startup been replicated various times, combines two key elements: a crash course on basics for stop-motion (in-camera) animation, using objects and substitution tricks and techniques, paired with the discussion/presentation of key storytelling strategies. The goal of the two-day activity was to assist participants in producing short animated informative films with basic equipment and every-day materials, starting from real data about sustainability in Tenerife.

2. Professional workshops.
8 h in 2 sessions of 4 h/day

2.1. Dialograma. The game of diagramming the dialectic.
Lead by Jaime Serra
The workshop is an artistic action in the form of a table game called Dialograma (acronym for dialectics and diagram) that allows to construct a diagram from an intangible such as the dialectic between a group of people. Players debate a number of topics during a set time. After discussing each of the themes, players place the chips that represented their ‘opponents’ on the game board, according to two criteria:
intellectual bond and emotional bond. A number of conclusions can be drawn from the analysis of the resulting diagram, these include: which players empathized the most, which were the most controversial issues, the ones that generating consensus, or the average point where the whole dialogue had been located.

2.2. Visualizing ethical values in Design praxis: the challenge of professional deontology towards the strengthening of democracy
Lead by Antoni Mañach
This workshop aimed to explore new meanings on the ethical relationships between design professionals and stakeholders. They tried to improve the designers knowledge about their duties-rights through the following research questions: can we visualize the connection between a complex world and the simplicity of deontological rules? What do we have to look for in ethics codes? Values, principles, functions, rights and duties, stakeholders, types of relationships among them, etc. Is the inductive method the ideal one to transform concrete cases of good or bad professional practices and deontological rules, in the form of duties-rights? These and others concepts were applied in a real and concrete case study: the creation of the ethic code for di-Ca, the Canarian Designers Association. Data visualization, diagrams and infographics were crucial in this process.

2.3. Draw me a coffee. A collaborative experience to understand how to design complexity
Lead by Letizia Bollini
The goal was to approach apparently trivial design problems understanding the complexity of the process, both as individuals and as a collaborative team. In the first phase, the proposed method led designers to look in a closer way to elements and connections among the parts of a whole system or process to generate a deeper understanding of the problem, iterations and the
mental models beyond the single object, service or system. In a second moment, participants had to apply the methodology to a (digital) signage project within the local spatial context in which the workshop takes place.

3. Educational workshops. 16 h in 2 sessions of 8 h/day

3.1. Introduction to Video Scribing
Lead by Alfonso Ruiz and Alicia Morales
The workshop was about the making of a video using the technique of video scribing (digital storytelling), or stop motion animation of a drawn narration. Students received a series of basic notions about frame by frame photography and digital post-production that allowed them to know the basics of this narrative technique, today a standard presentations practice. Although apparently simple, its development implies a solid basic knowledge.

3.2. Information Design for exhibiting complex data
Lead by Noa Real
This practical workshop was based on the design of informative graphs to explain a process or a series of complex data. Starting with a practical case based on the history of poster design, students made infographic poster proposals that organized the information in a clear and didactic way. Students were introduced to the use of graphic design for complex information communication in an orderly and understandable way. Although students in the Bachelor Degree in Design dominate digital graphic design tools, usual applications consist on illustration or corporate identity projects, while they don’t usually face with challenges on graphic organization of data and complex information.
The course provided skills in information architecture, composition and tools to make the presentation of information impactful, easy and comprehensible.
3.3. Exhibition Design: Structure in space. Space between us
Lead by Magda Piczyska, Wojciech Kapela and Carlos Jiménez
The workshop aimed at developing a cross-cultural experimental exhibition space for international and inter-generational dialogue. The chosen topic was the significance of the sign: symbols, signals, images and their application in the construction of an informative environment – an encoding of space. A spatial structure was built using simple mapping techniques. Participants in the workshop learnt to transform narrative information into 3-dimensional space, by using data about the inhabitants of Tenerife as a case study.

4. Conclusions
Despite the exhausting organization of eight parallel workshops, the experience was a success on many grounds, and worthy to be considered for future events. Almost two hundred BA, Master and PhD ULL design students attended the program. Classes were put on stand-by for the week – a first in the history of the School – and replaced by workshops. Switching from the usual routine allowed students to face new approaches, dynamics and skills. It was the first time that many of the participants had the opportunity of being somehow involved in an international design conference. Leading the workshops was a chance for their leaders to learn and change their perspectives. The resulting collaborative environment overtook the hierarchies and rigidities of a typical student-teacher relationship, encouraging networking among students, professors and attendees. Although the Faculty of Fine Arts of ULL has a history in design teaching, “communicating complexity” is a relatively new field for its curriculum, if compared to other design branches. We wish therefore to thank the colleagues of DADU-UNISS Alghero for their dedication in giving continuity to the 2CO 2013 conference, giving us the opportunity to celebrate it in Tenerife.