## First attempt at policies for FabLabs

<u>In 2010</u>, in USA the representative <u>Bill Foster (D-IL14)</u> introduced a <u>bill before congress</u> called *National Fab Lab Network Act*, that unfortunately was unsuccessful, as no policy or law was actually generated. Albeit unsuccessful, this was the first attempt at drafting policies for FabLabs.

Title: To provide for the establishment of the National Fab Lab Network to build out a network of community based, networked Fabrication Laboratories across the United States to foster a new generation with scientific and engineering skills and to provide a work force capable of producing world class individualized and traditional manufactured goods. [...]

to seek to establish at least one Fab Lab per every 700,000 individuals in the United States in the first ten years of its operation.

## FabCity: new policies for new cities and local communities around Fabbing

The FabLab network is now also expanding within cities: in some cities there will be soon more than one FabLab, and this will be a very interesting step in order to see their local impact and their interactions.

For example, the Barcelona FabCity project was first announced at <u>Fab7</u> in Lima (Peru) by Toni Vives, Head of the Department the Urban Habitat in the Office of the Mayor of Barcelona and member of the IAAC Board of Directors (see <u>the picture</u> here below).



The project consists in expanding the number of the FabLabs within the city of Barcelona (calling them "Ateneus de Fabricació"), enabling each area of the city to be self-sustainable in the production and manufacturing. Actually, before the project was presented, there was already the plan to build a second FabLab over the mountains around the city, the Green FabLab, a FabLab centered around sustainable digital fabrication technologies for the green environment. The project has been funded by the Spanish state within the Plan Avanza initiative with 1.9 €million.

If you want to get a broader urbanistic and architectural perspective on this vision, you can read Vicente Guallart's excellent book (in Spanish) <u>La ciudad autosuficiente en red</u>. Vicente Guallart has been co-founder of the Institute of Advanced Architecture of Catalonia (IAAC) and is now Head of Urbanism in the town council of Barcelona; you can watch (in Spanish) this interview or his TEDx presentation below.

<u>Tomas Diez</u>, Project Manager at <u>FabLab Barcelona</u> (hosted at <u>IAAC – Institute of Advanced Architecture of Catalonia</u>), has been interviewed <u>two times</u> about the FabCity concept (and further information can be read from <u>this interview</u> in Spanish with the *La Vanguardia* newspaper or this blog post):

Right now we have two fab labs. One is in the Museum of Design which is being moved to the east of the city and another is in the old town. We are working on two more for the summer of 2012, a green fab lab in the northern outskirts of Barcelona and a second in the disadvantaged neighborhood of Ciutat Meridiana. It's a challenge. We want to show that this model can transform production methods, as well as social bonds.

We're going to create a foundation and we're currently developing a brand – FabCity. We're planning to combine both public and private sector funding to promote the project, which will be generating new economic revenue. In the medium term, our plan is to set up a fab lab in each neighborhood. Eventually they will be managed by the neighborhood's residents. We'll train them, and in turn they will train others.

This proposal consists on a fab city made up of an interconnected community of neighborhood fab labs. The venues' goals would be to encourage entrepreneurship and interest in innovation that have already been present in Barcelona throughout centuries. As they see it, bringing factories back to cites will lead us through a new industrial revolution where production methods and social bonds will be transformed.

[...] cities need to be updated from the organization point of view, we need to re-envision the role of governments, and think that cities should provide commodities and platforms for people to solve their own needs. Services are associated with the consumption model, which has the service provider in one side and the consumer in the other, in the new scenarios this both ends are merged, and we need spaces and platforms for this to happen at different levels, from the neighborhood exchange, as happened in the past, to the high tech centers to bring digital fabrication to common people, as happened with web publishing, photography or video making. In the recent past we became publishers, editors and even journalists, now is the time of the makers.

Neighborhoods will be production clusters, as they did in the medieval age, we are in our way to a high tech medieval age, not only concentrated into the technocrat point of view, but with a high load of humanism and local needs perspective.

There are also similar initiatives emerging in Barcelona, including the <u>Maker Convent</u> (see more background in <u>this blog post</u>).

During the <u>Open Knowledge Festival 2012</u> (which I co-organized) I moderated <u>a panel</u> with Tomas Diez and Peter Troxler about the policies for Digital Fabrication and Open Design, and you can watch also Tomas Diez's presentation of the FabCity project here below (the panel starts at 6:14). Another preentation by Tomas Diez on the same topic can be watched <u>here</u>.

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## More FabCities?

While the Barcelona FabCity represents the first attempt at building a local network of FabLabs within the same city, we can expect to witness similar experiments soon. For example, in UK, FabLab Manchester now plans to open a network of 30 Labs across the UK over the next eight years, and some of them could be in the same city. This project however seems not to be part of any public policy, as the <u>FabLab Manchester</u> is owned and run by <u>The Manufacturing Institute</u>, a charity funded by manufacturers and universities that works with companies to help improve skills and productivity.

A different experiments seems to be taking place in Russia where, after the first one, FabLab@School, opened by Stanford University in Moscow, the Russian Ministry of Economic Development is said to be financing a network of more than 20 labs in Moscow and its surroundings (and this could be another FabCity), with more than 100 others expected across Russia.

## Another attempt at policies for FabLabs

During March 2013, congressman Bill Foster introduced again the National Fab Lab Network Act of 2013 to promote advanced manufacturing in the U.S. and invest in the next generation of entrepreneurs and innovators. The bill is being introduced with bipartisan support from 15 original co-sponsors including Rep. Randy Hultgren, Rep. Tom Massie, Rep. Chris Van Hollen and others. The <u>proposed legislation</u> would create a nonprofit entity to establish a National Fab Lab network throughout the United States.

The goal of the network will be to establish at least one Fab Lab for every 700,000 people, giving students throughout the country access to the tools and skills needed to bring their ideas to life. The legislation does not provide funding to the network, but seeks to provide the project with the recognition needed to grow and establish new centers throughout the country. You can read the full legislation <a href="here">here</a>.