

# London

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# Makers of London, Unite!

By Côme Bastin and Fleur Weinberg

How can the productive role of cities be reinvented in the age of globalisation and digitalisation? This is the question that led Thomas Ermacora and his team to launch the Maker Mile, after having opened the first Fab Lab in London. By bringing makers together and showcasing their activities to the wider public, this organic network aims to stimulate the maker economy and connect it to the needs of local people.

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Gareth Owen Lloyd, coordinator of the Maker Mile.

*“According to conventional wisdom, fabrication is where raw materials are turned into finished goods on a large scale”, says Gareth Owen Lloyd, coordinator of the Maker Mile. “The image that comes to mind is of industrial buildings on the brown belt of a regional city, and shipping containers packed with products for a global market.” But what if rather than sending objects from a factory far away, citizens could download a design file and do their own fabrication in a local digital manufacturing space? “The future is distributed,” Gareth Owen Lloyd believes. “The products people want and the food they need can be made and grown in a network of mini factories, farms and maker spaces scattered over a city and enabled by digital technology and the internet.”*

The Maker Mile was launched in London in 2015 to promote such a “Fab City”. At the intersection of Mare Street and Regent’s Canal, this informal brand gathers old and new makers from the boroughs of Hackney and Tower Hamlets within a one-mile radius. Among them, you will find Lime Wharf, a “culture factory” hosting the first Fab Lab in London; Surface Matters, a centre of innovative architectural materials; Keeley & Lowe, a printer with a 100-year history; London Hackspace, a community-run workshop where people share digital tools and knowledge; and London Fields Brewery, the first commercial brewery to open in central Hackney since the 19th century. Over time, some 60 organisations have come together to contribute to an ecosystem of producing. Every year in September during the London Design Festival, the Maker Mile opens its doors to the public to increase awareness of local fabrication.

## The first Fab Lab in London

It all started when Thomas Ermacora, a social entrepreneur working in the field of participatory urbanism, opened Lime Wharf in the area in 2012. Described as a “culture factory”, this innovation place enables artists and scientists to collaborate in residencies, think tanks, gatherings and exhibitions. *“I think one of the sources of urban dysfunctionality is that normal people haven’t been given the infrastructure to take part in the global knowledge and culture economy,”* explains Thomas Ermacora. *“With Lime Wharf, I wanted to open a centre that would serve as a prototype.”* But soon, Thomas Ermacora wanted to go further and allow ordinary citizens to have a greater impact on their cities. He set up the first Fab Lab in London, Machines Room. Filled with tools such as 3D printers, laser cutters, digital milling machines as well as more standard equipment, this manufacturing space allows professionals and novices to prototype whatever object they want. *“We realised that the area was hosting some of the last remaining craftspeople in London and also a new maker population focused on using skills and technology to become participants in the next economy,”* he recalls. *“So we started to map those communities and began a conversation, offering them the opportunity to use our machines.”*

Earlier in 2009, Thomas Ermacora launched Clear Village, an NGO involving communities in micro-urbanistic interventions to accelerate urban regeneration. In 2014, the organisation joined





James Hoyle and Son's foundry has been in the Maker Mile area for over 100 years.  
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Top: For the past three years, tours around the Maker Mile have helped promote different maker industries in the area. © Machines Room  
Bottom: Technology Will Save Us, a company producing educational technology kits for children, was one of the stops on the tour. © Machines Room

## For a new industrial revolution in London

During the 19th century, London was the cradle of an industrial revolution that changed the face of the world. Yet nowadays the capital of the United Kingdom is considered a leading financial centre. Like many major European cities, London is no longer

much of a productive city. The skyline of the financial district dwarfs the former smokestacks and rising rents have pushed the working class out of the city. With the birth of the Fab Lab and Fab City movement, a new wave of makers have appeared who combine

craft with recent digital and physical tools of production. Could it be a way to let London's inhabitants create the objects and the city they want?

“We had both local and international visitors. Some were interested in art and design, but others didn’t have any ideas about it.”

Jane Campbell, marketing director of Surface Matter and coordinator of Open Mile 2017



Participants of the Open Mile learned about the printing process at Keeley and Lowe Ltd. © Machines Room







Makers analysed their common needs at the start of the experiment. © Clear Village

## Bottom-up urban design

Clear Village is a London-based charity that helps communities build a better future through creative regeneration. They work together with partners like social landlords, local councils and community groups

to bring durable change to communities. They identify challenges, build on existing community assets and involve community members through participatory design. Clear Village was founded in 2009 by Thomas Ermacora,

who also set up Lime Wharf and Machines Room. The three organisations are located at the centre of the Maker Mile, a large cluster of fabricators, studios and workshops in East London.



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Thomas Ermacora, founder of Clear Village.

the Human Cities programme and in 2015, Clear Village, Lime Wharf and Machines Room co-organised one of the first Human Cities events, which brought together all the partners in the network. The event saw the launch of the first ever “Open Mile”. For one evening, 12 spaces in the area, all within walking distance of each other, opened their doors to the public. Visitors could get involved in hands-on making in multiple locations. Over 600 people collected a map, made locally at East London Print Makers, and followed the design trail on a rainy Monday night. “*They experienced a thriving community that many hadn’t realised was on their doorstep,*” remembers Gareth Owen Lloyd.

## Recycling plastic

One year later, during the 2016 edition of the London Design Festival, the Open Mile took place again, on a larger scale. Visitors were invited to join a guided tour of the Maker Mile, discovering both the fabrication spaces of tech newcomers and the older workshops of local makers. The tour started at the Fix Our City exhibition, hosted by Machines Room and filled with projects from the Maker Mile. “*It proved that the area was a rich example of Fab City principles,*” Gareth Owen Lloyd points out, “*showcasing local companies such as Sugru (a glue for makers), SAM Labs (a kit for learning about hardware and software), Technology Will Save us (educational toys for children) and Open Desk (a digital library of furniture that can be downloaded and manufactured locally)*”. The Open Mile highlighted the principles of recycling and circular

economy, at the core of the Fab City philosophy. “*People were asked to give us their plastic bottles for the Precious Plastics exhibition,*” Thomas Ermacora says. “*These were then shredded and heat pressed in a microprocessing station, to make everyday objects like cups and plates.*” Finally, the highlight of the tour for many was James Hoyle and Son’s foundry, which has been operating since 1880. Including traditional businesses in the tour helped to create a link between past and future industries in the Maker Mile area.

For the 2017 edition of the London Design Festival, the Maker Mile became part of the official “design routes”, which highlight clusters of design activity in the city. One of the challenges of the Open Mile is to attract more local citizens, not only those already working in making or interested in design. “*That’s always the hardest thing and it takes time,*” Thomas Ermacora believes. “*At first, the Maker Mile attracted people in the maker movement, but we’ve had more and more citizens who aren’t from the educated middle class.*” The hope was also that someone in the Maker Mile community outside of Machines Room would take the lead. That hope became reality when Jane Campbell, Marketing Director for Surface Matter, organised the 2017 edition. Her studio also hosted an immersive installation by Artist Lisa Traxler. “*We had both local and international visitors,*” she remembers. “*Some were interested in art and design, but others didn’t have any ideas about it.*”

## Organic network

The Open Mile may be the key occasion to federate and democratise the Maker Mile, but its survival is ensured by what happens in between. Members have been getting together for digital and physical workshops, exhibitions and potluck dinners. Indeed, rather than branding local producers, the project is about creating an organic community that can become self-sustainable and self-organised. *“We want to create meaningful relationships between citizens instead of taking a top-down approach,”* Thomas Ermacora explains. It’s a philosophy inspired by the book he published in 2016, *“Recoded City: Co-creating Urban Futures”*, in which he explores an emerging range of collaborative solutions and distributed governance models for alternative urban design. *“The main difficulty with the Maker Mile and that kind of organic project is that you don’t know in advance where it will end up,”* says the founder of Lime Wharf, Machines Room and Clear Village. *“But in 5 or 10 years, we will have been part of shaping the conversation about how ordinary citizens, craftspeople, makers and designers can claim the urban space they are living in.”*

The conversation is urgent, as the Maker Mile area is changing very fast. *“Despite the high concentration of makers, many of the industrial buildings are redesignated as residential,”* explains Gareth Owen Lloyd. *“Stars of the Open Mile event have been forced out by rising rents.”* Recently, the Machines Room Fab Lab had its rent doubled and had to move to another location nearby. By planting a flag for makers, Gareth Owen Lloyd hopes awareness can be raised that this part of the city has to remain a productive area. *“For future cottage industries to grow we will have to find ways for housing and manufacturing to coexist—with the help of Human Cities we can test this in the Maker Mile, the perfect prototype for a Fab City.”* The Maker Mile hasn’t received any municipal support for its efforts. But the collective is not alone, as other areas of London have also started to work towards the same goal. Jane Campbell hopes that everyone in London can *“link up in the future”*. And outside London, the European Fab City network now stretches from Amsterdam to Barcelona: all citizens who claim that their city is not only about offices and housing, but also about co-construction and co-production.