

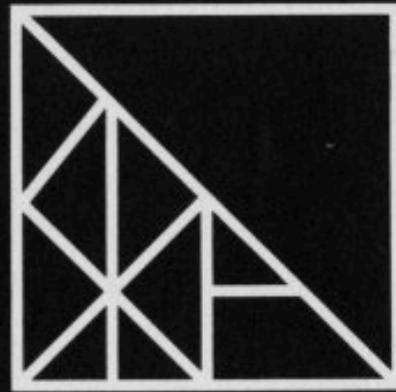
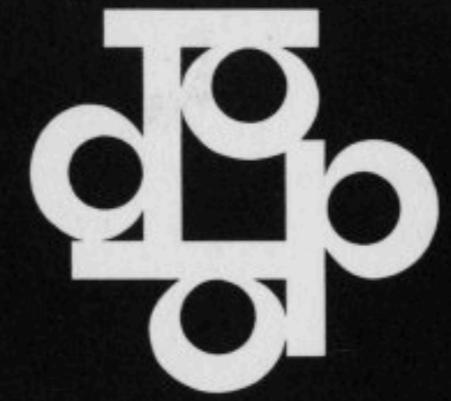
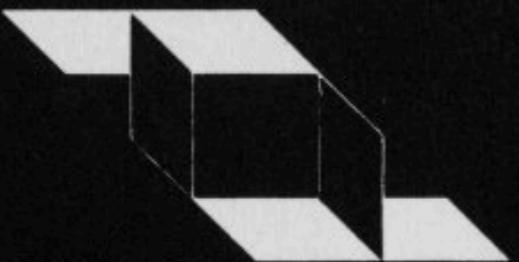
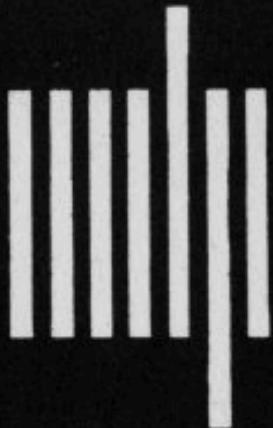
# Muriel Cooper 1925–1994

Educator, Art Director and Graphic Designer at MIT Press and MIT Media Lab

*Founder of the Visual Language Workshop*

***“Print is rigid. Electronic is malleable.”***

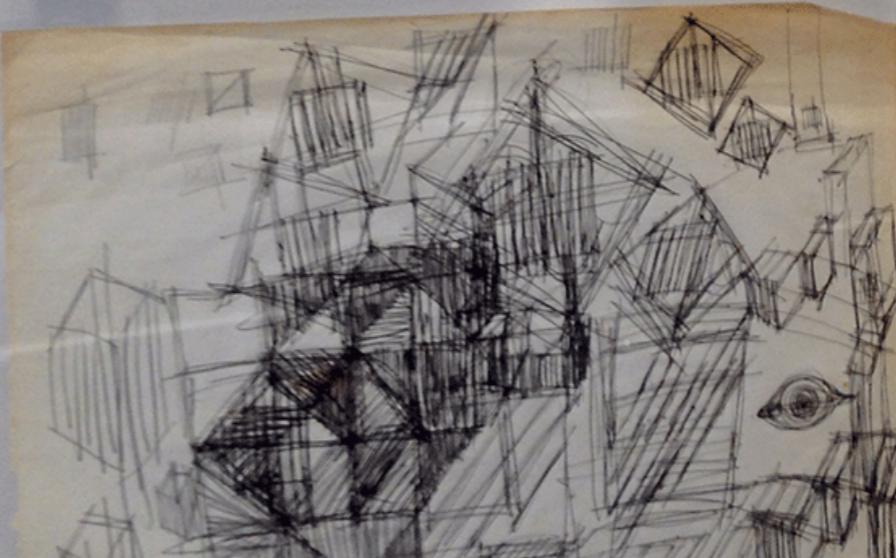
(Symbols designed by Muriel Cooper: a. The MIT Press colophon; b. The symbol for Technology Square; c. The symbol for Air Force Cambridge Research Laboratories; d. Device for Sylvania brochure; e. The symbol for the Boston Redevelopment Authority)





Muriel Cooper began her career as a freelance **graphic designer** and later became an **editorial designer**. She graduated from and taught at the Massachusetts College of Art, where she would learn studio practices to take into engineering disciplines. She also studied **exhibition design** on a Fulbright Scholarship. She worked as an art director, educator, and designer at MIT.

- Designer of 500+ books, 100+ awards
- Design director at MIT Press
- Cofounder of the Visible Language Workshop
- Cofounder of the MIT Media Lab



The Visible Language Workshop (VLW) was home to “Messages and Means,” a consistently oversubscribed class that introduced students to graphic design, **giving them access to methods of production and encouraging them to pursue new forms of graphic communication.** Led by visionary director Muriel Cooper, and embedded in the rich technological environment of MIT, the VLW was ideally positioned to innovate those new forms. As early as the 1980s, Cooper had recognized that “the shift from a mechanical to an information society demands new communication processes, new visual and verbal languages, and new relationships of education, practice, and production.”

- **MIT Archival Museum**





Eleven years after its founding, in 1985 the VLW became one of the Media Lab's first research groups. Cooper, who was the first graphic designer on the MIT faculty, became the Lab's **first female faculty member to be awarded tenure**.

# Visualization of New Concepts

- Brings Agency and Focus
- Mapping in X and Y
- Multi Layered Segmentation
- Intelligent ZODs
- Creating Molecules



"My model is very much more an art school, or a design school, where you don't give recipes for things," she said. "But it's not purely a studio, because **there's a lot of rigor in making a machine do something you want it to do**. The electronic environment seems to me to have significantly different characteristics than any medium we've communicated in before."

*- Muriel Cooper*

Educational  
Messages and  
Means  
The Rotation  
System

The rotation system was devised to reduce real time spent on the offset press and to maximize the results.

Square paper is used.

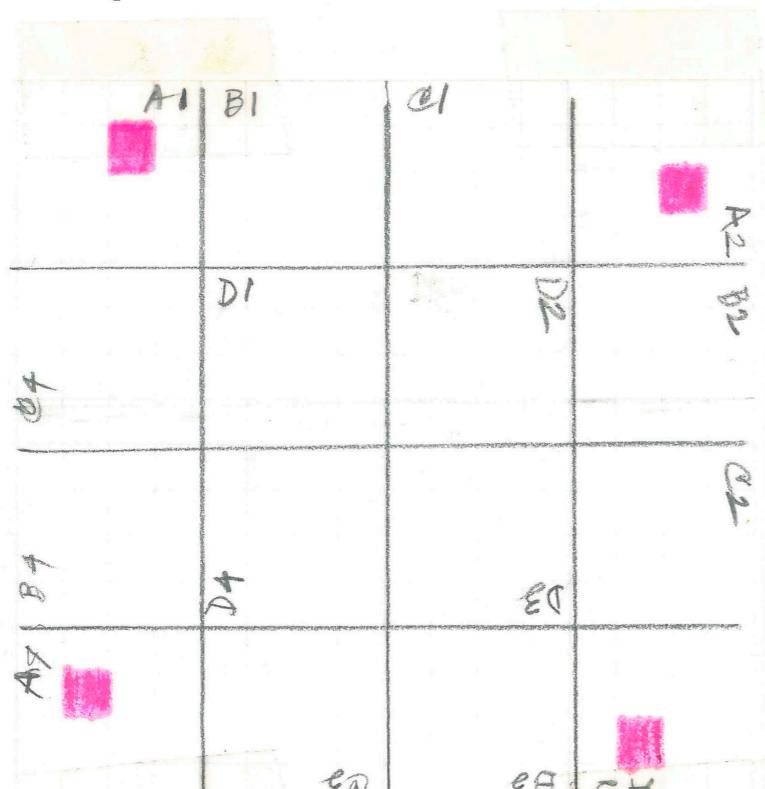
The plate is divided into a grid which generally allows four people to work on the same plate and produce a four color 'image'. That image can be cumulative or the same image rotated on itself.

It is a simple and very complex idea. It is used because it provides immediate and maximum interaction with an offset press which is normally a mysterious and highly specialized reproduction tool.

The professional designer or user is separated from such communication tools and an entire intermediate language is devised for the user and the printer. Once the commitment to print is made, there is no return without great cost. Mistakes are irretrievable. Options minimal. Creativity is confined to the beginning of the process. Mass production requires this in order to survive.

Experiment and play as a part of professional discipline is difficult at best. This is not only true of an offset press but of all activities where machines are between the concept and the product.

The re-establishment of a ~~complete~~ relationship between process and product and person is perhaps the most valuable aspect of this course and the workshop.



A snapshot of ACT's VLW Archive includes Cooper's description of the rotation system, an efficiency method for offset press, and a color sample in four hues demonstrating **how a singular image can be manipulated in a manner that enhances experimentation while simplifying the process**. In Cooper's words, "the re-establishment of a complete relationship between process and product and person is perhaps the most valuable aspect of... the [Visible Language] Workshop."

- MIT VLW Archive

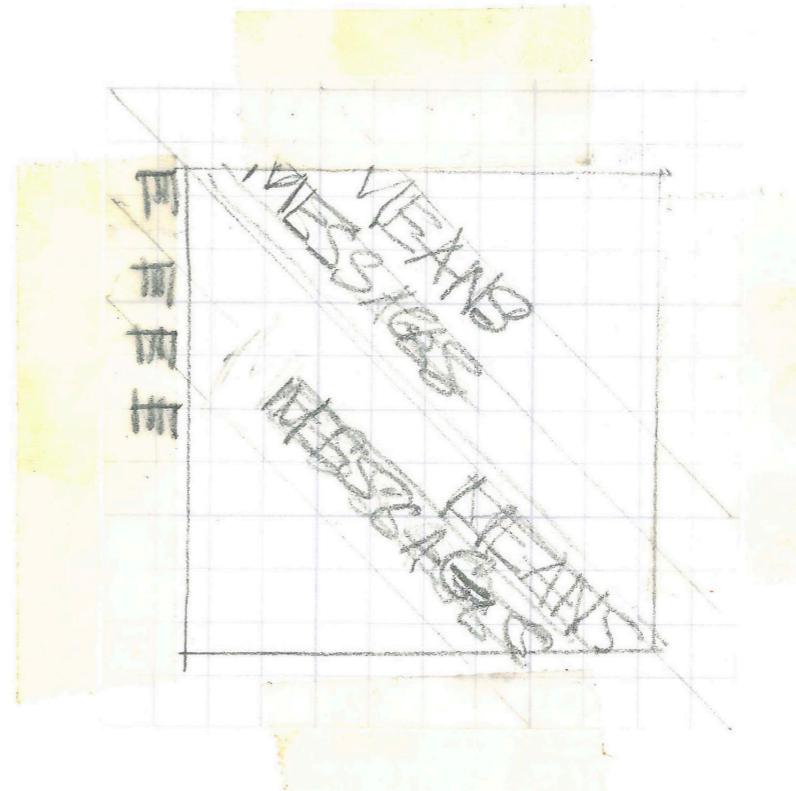
"Complete with  
Cooper's handwritten  
edits, these documents  
from the VLW Archive  
reveal the thinking  
behind the processes  
developed at MIT that  
would spark  
experiments in art,  
technology, and  
design."

**- MIT VLW Archive**

Note:  
Plastic sleeves  
hold material  
to be removed.  
Please take out.

An example of one image rotated on itself four time rather than a cumulative one as indicated on the sketch.  
This image is a section of an early Messages and Means 'participatory' poster made from found materials such as pres-ply circles placed directly on mylar, bypassing the making of negatives.  
Such a complex image will result in a particular kind of overprinting

Such a print is enclosed and was typical of earlier M&M groups.  
The M&M Poster designed by Muriel Cooper and printed by Ron McNeil  
was printed from only one plate.  
The image planned for maximum benefit from minimum means.



An example of how the understanding of a process is integrated into the conceptualization of the produce



**Pentagram's Michael Beirut**

molecular  
machines



affective  
computing

civic  
media

lifelong  
kindergarten



object-bas  
media



responsive  
environme



synthetic  
neurobiology



playful  
systems



speech +  
mobility



**RISD President John Maeda**

nera  
ture

d  
erfaces

mediated  
matter



personal  
robots



social  
machines



viral  
communications

**Information Architect  
Lisa Straussfield**

media



Weisenberger writes that throughout her career, Cooper's concerns "remained remarkably consistent: she turned reproductive technologies to productive ends; made or modified tools and systems to achieve quicker feedback between thinking and making; and dissolved the lines between design, production, and different media."

"I was convinced that the line between  
**reproduction tools and design would blur**  
**when information became electronic**, and that  
the lines between designer and artists, author and  
designer, professional and amateur would also  
dissolve."

*- Muriel Cooper*

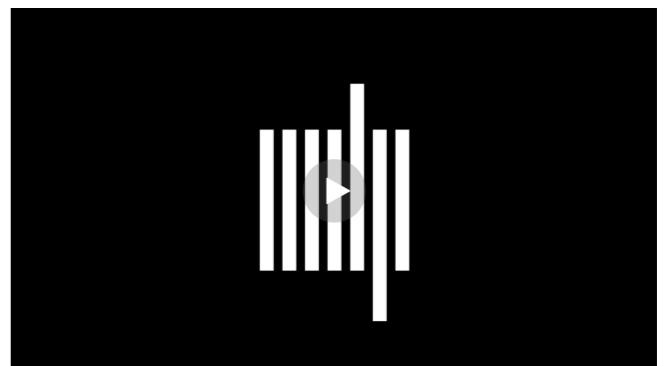
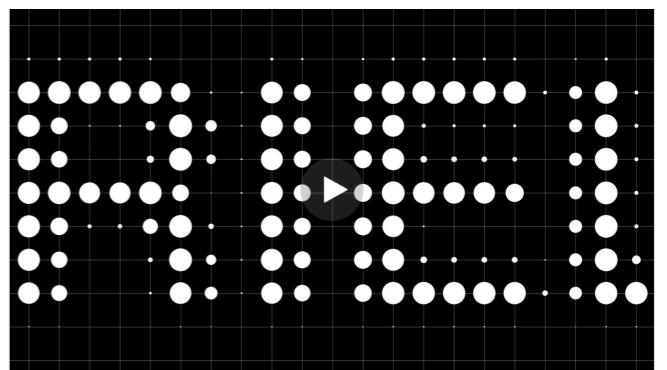
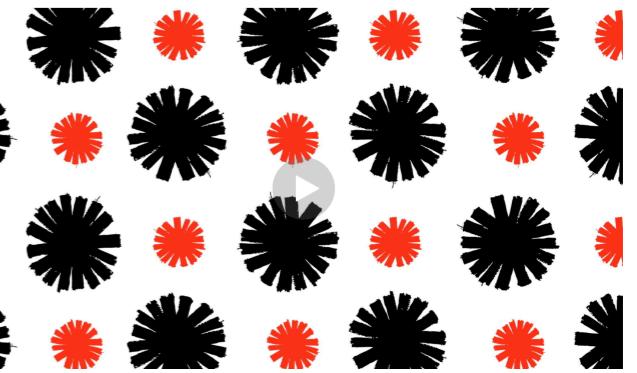
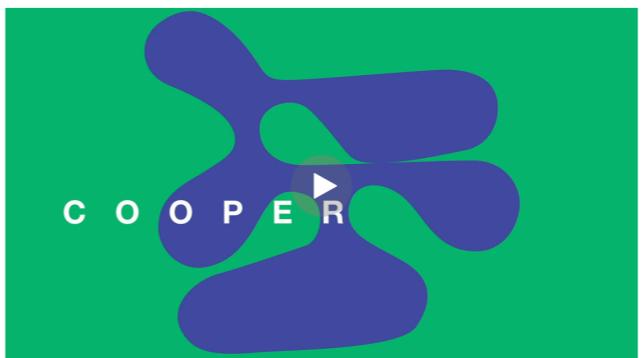


A lifelong animation enthusiast, Cooper regards this technique as a **"key component to an overall set of communication"**

**vocabularies.** Not as in video, not as in scientific visualization or computer animation. Just animation." Asked what is so compelling about it, she began by stating the obvious: "It moves, it tells you much more. I'm more interested in motion than character animation, though that is important as well. Did I love Disney, you mean? Was I turned on by Pinocchio as a child?"

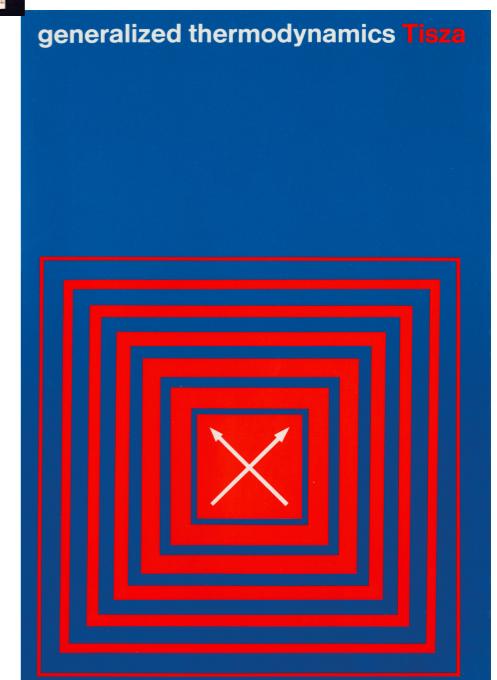
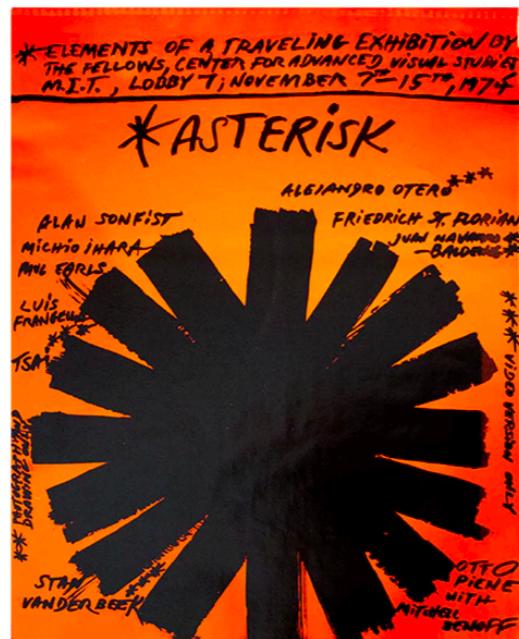
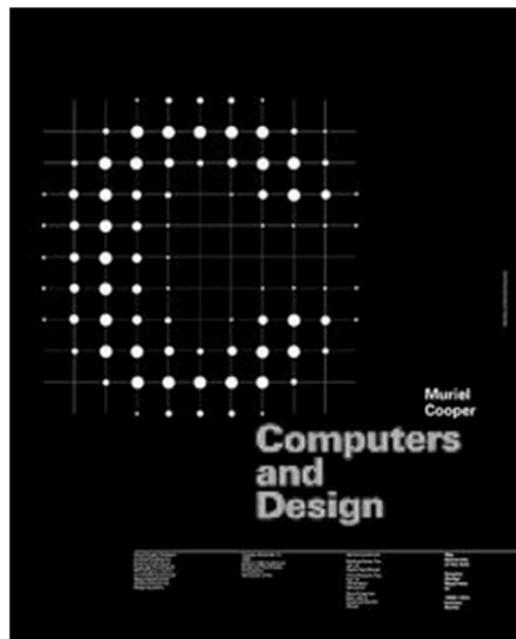
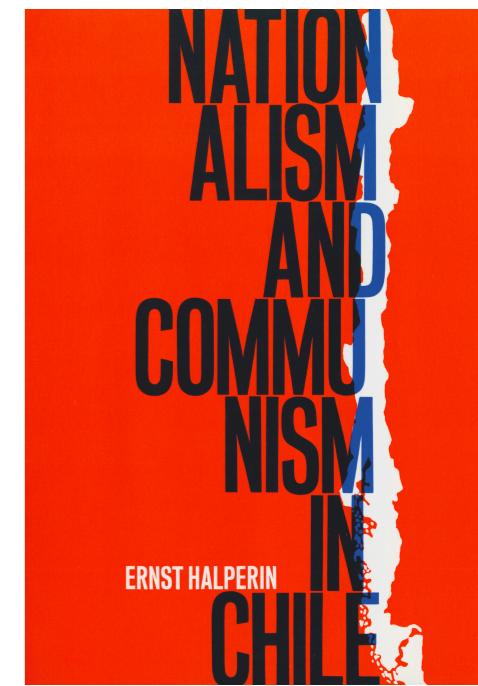
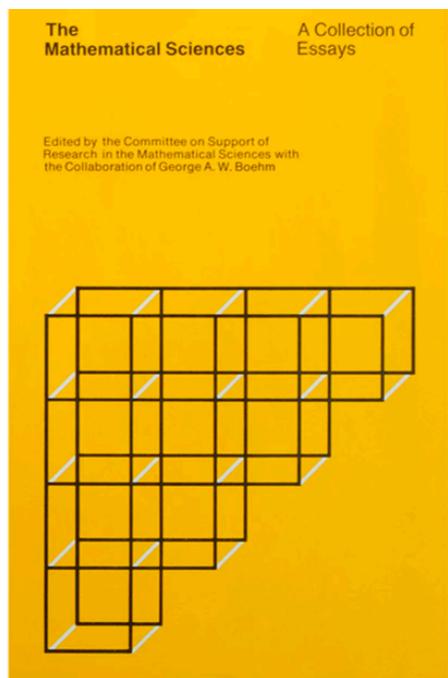
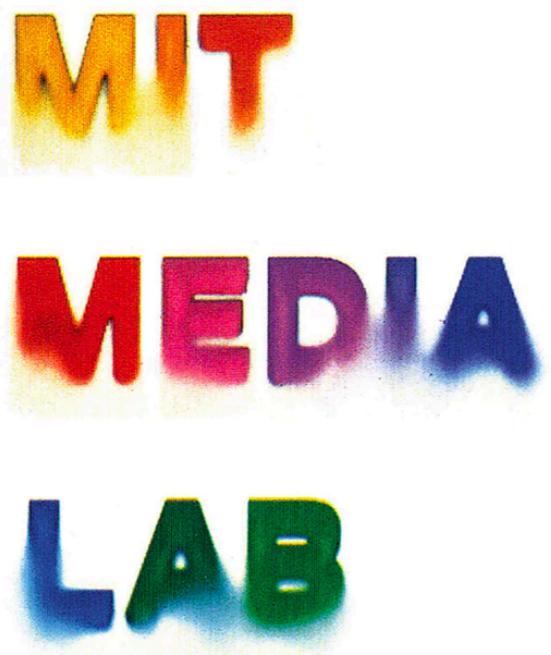
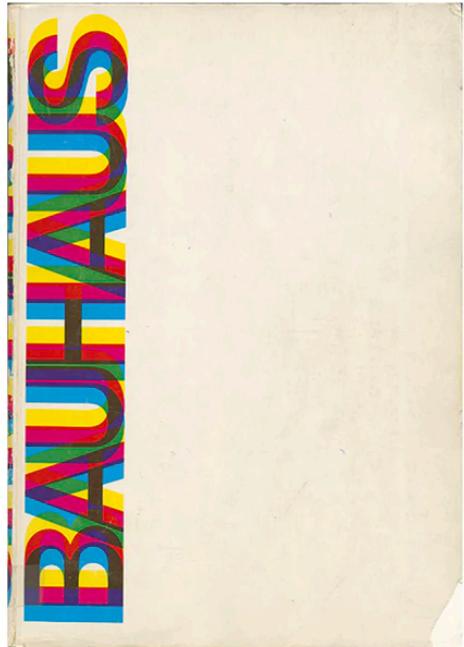


MURIEL



MURIEL

**- AIGA, "Medalist: Muriel Cooper"**



"I have a profound disdain for answers. We do a lot of groping here," she said. "I don't think there are answers. I think there are thoughts."

– **Muriel Cooper**

Which mediums would excite Muriel Cooper today?

What disciplines do you see merging in new ways as technologies develop?

What do you think it says about design and technology that Muriel Cooper's career is most influential through her educational efforts?

How would Cooper think of data as a resource?

## **What is the style/use/purpose of your subject?**

To provide context for the origin of the field of interface design and the art-tech industry. “Design History 101” and celebrate new perspective

## **What does this subject do well? What do they do poorly? What do you like/dislike?**

Cooper was an exceptionally talented designer and alternative thinker. I'm having a hard time finding things she did poorly, though she was a self-proclaimed non-coder as it completely overwhelmed her. Her work is also almost too abstract to apply to many scenarios.

## **How does this subject connect to other readings and discussions within the course?**

Interface design is critical to the study of data visualization. Viewing technology as a collaborator and creative medium is integral to the communication of complex data stories.

## Videos

- Bauhaus: [https://www.youtube.com/watch?time\\_continue=1&v=fD2LM\\_IYTKg](https://www.youtube.com/watch?time_continue=1&v=fD2LM_IYTKg)
- Ted5: <https://www.youtube.com/watch?v=BhrZHkdc2rU>
- information landscapes:[https://www.youtube.com/watch?time\\_continue=26&v=Qn9zCrlJzLs](https://www.youtube.com/watch?time_continue=26&v=Qn9zCrlJzLs)
- <https://www.pentagram.com/work/muriel/story>
- animation: <https://vimeo.com/238311156>
- animation: <https://vimeo.com/238310952>
- animation: <https://vimeo.com/238311453>
- animation: <https://youtu.be/vvW7gfYHSc4>
- animation: [https://www.youtube.com/watch?time\\_continue=29&v=U5pP\\_cNuFWU](https://www.youtube.com/watch?time_continue=29&v=U5pP_cNuFWU)
- Muriel: A Symposium [https://www.youtube.com/watch?time\\_continue=5&v=a8pM0gLFnPM](https://www.youtube.com/watch?time_continue=5&v=a8pM0gLFnPM)

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- <https://www.wired.com/2014/10/mit-media-lab-gets-transforming-logo-courtesy-pentagram/>
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- <https://www.aiga.org/medalist-murielcooper>
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- <https://news.mit.edu/1994/cooper-0601>
- <https://www.artinamericamagazine.com/news-features/interviews/this-stands-as-a-sketch-for-the-future-muriel-coopers-messages-and-means/>
- <https://walkerart.org/magazine/muriel-cooper-turning-time-into-space>

## Sources: Papers

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- Muriel Cooper: <https://www-oxfordonline-com.libproxy.newschool.edu/groveart/view/10.1093/gao/9781884446054.001.0001/oao-9781884446054-e-7002021579>
- Messages and Means: Muriel Cooper at MIT:<https://www-tandfonline-com.libproxy.newschool.edu/doi/pdf/10.2752/175470715X14153615623808?needAccess=true>
- “Doing it Deadpan” Venturi, Scott Brown and Izenour's Learning from Las Vegas: <https://search-proquest-com.libproxy.newschool.edu/docview/232912835?OpenUrlRefId=info:xdid:primo&accountid=12261>