

Bauhaus to Boss Morris

Collaboration in Design Practice and Processes.



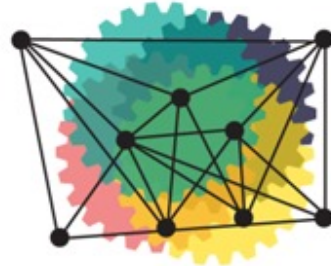
(...)disciplinary method

INTERdisciplinary



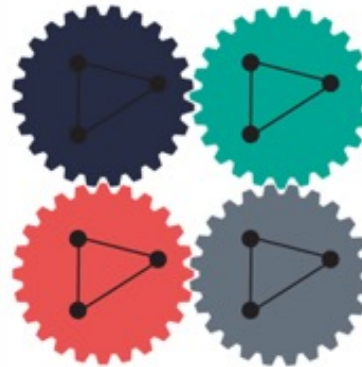
Multiple academic fields interacting

TRANSdisciplinary



Multiple academic and non-academic fields interacting and co-mingling

MULTIdisciplinary



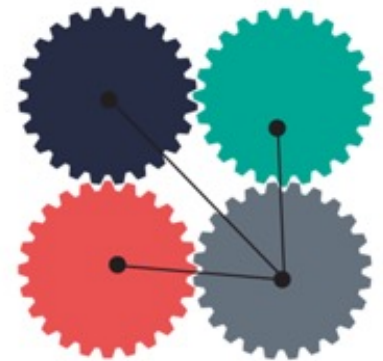
Several academic fields adjacent to one another

INTRAdisciplinary



Entirely within a single academic field

CROSSdisciplinary



A single academic field used as a lens to understand other academic fields

<https://www.maine.gov/doe/learning/II/what#:~:text=Interdisciplinary%20instruction%20relies%20on%20multiple,talents%2C%20backgrounds%2C%20and%20values>

An interdisciplinary approach in arts practice can involve integrating multiple academic fields. Interdisciplinary work relies on multiple content cogs working together to develop knowledge, problem-solving skills, self-confidence, and self-efficacy, whilst bringing together various learning styles, diverse cultural and social backgrounds, interests, skills, and values.

Multidisciplinary/ Interdisciplinary/ Transdisciplinary

Multidisciplinary (might be how you talk of your own practice)

where the disciplines remain intact but focus simultaneously on a common theme

themes or problems that bring together a number of disciplines.

In arts practice you might combine sound, textiles and poetry, for example.

Interdisciplinary (how you combine yours with that of others in practice)

A conjoining of disciplines – development of a shared understanding of a theme or solution to a problem

themes or problems focus on commonalities between disciplines.

Transdisciplinary (how you relate/respond to experiences)

where disciplinary distinctions are no longer evident

revolves around real-world experiences, without regard for discipline-specific understandings.

<https://www.inspiringinquiry.com/learningteaching/transdisciplinary>

Interdisciplinary Practice

“In the present context, where artists and designers must respond to challenges of global magnitudes, engage with cross-cultural, often conflicting conditions, and operate in disparate economic and societal realms, the demands for increased disciplinary adaptability and collaboration are paramount.”

<https://www.gsd.harvard.edu/course/interdisciplinary-art-practices-fall-2015/>



Fashion Revolution – How to be a Fashion Revolutionary

<https://www.fashionrevolution.org/how-to-be-%20a-fashion-revolutionary/>

Fashion Revolution is the world's largest fashion activism movement, mobilising citizens, brands and policymakers through research, education and advocacy.

Fashion Revolution is a global movement of people who make the fashion industry work. We are the people who wear clothes. And we are the people who make them.

We are designers, academics, writers, business leaders, policymakers, brands, retailers, marketers, producers, makers, workers and fashion lovers. We are the industry and we are the public. We are world citizens. We are Fashion Revolution.



Avant -garde groups/movements concerned with Interdisciplinary method

The Gesamtkunstwerk, (total work of art)

Arts and Crafts, William Morris

Wiener Werkstätte, (Viennese workshops: 1903-1932)

Vkhutemas, (1920 -)

Bauhaus, (1919-33)

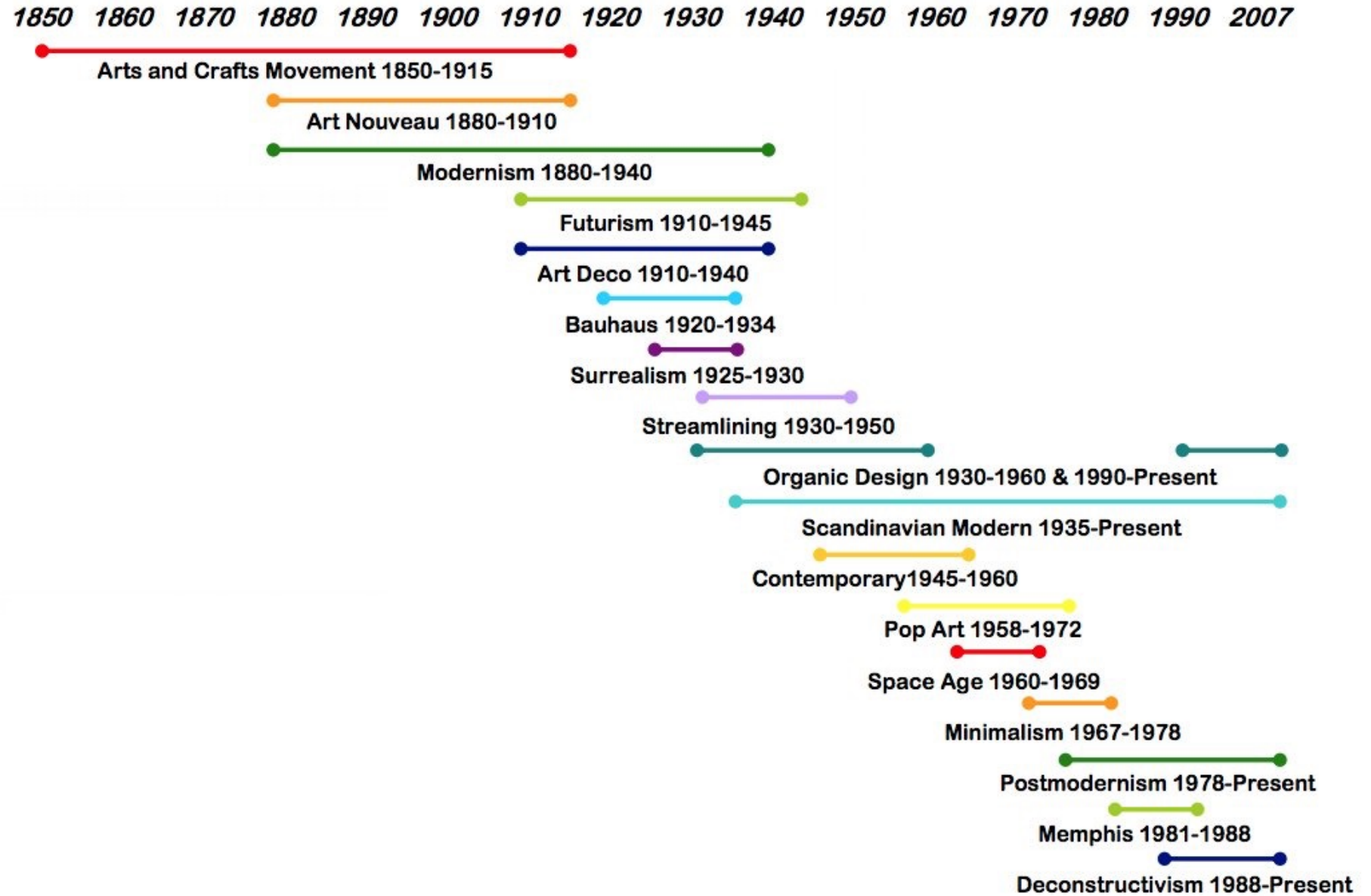
Fluxus, (1960's and 1970's)

Womanhouse, (1972)



IMAGE: <https://mahlerfoundation.org/mahler/locations/austria/vienna/wiener-werkstatte/>

Design Movements Timeline



<https://twitter.com/whitingx/status/996042453013745665>

Interdisciplinarity at the Bauhaus (1919 -1933)



László Moholy-Nagy, member of the Bauhaus team, was a strong advocate of Inter disciplinary collaboration and the Integration of technology referring to Bauhaus creatives in the field as 'cultural engineers'.



Design Collaboration at the Bauhaus

Gropius advocated interdisciplinary collaboration for the development of complex projects, implying the enhancement of quality due to a **Gestalt affect** among the team. **"Synchronizing all individual efforts, the team can raise its integrated work to higher potentials than is represented by the sum of the work of just so many individuals"** (1943, 80).

Regarding authorship, he resisted stylistic labeling, yet described the importance of a master motif. "The task grows gradually above the individual, who finally hardly remembers who initiated this or that part of the idea, as all their thoughts resulted from mutual stimulation" (1943, 80).

Bauhaus believed that **the mind transforms 'physical fact' via innate gestalt structuring processes in the mind involving combination and re-combination**, and they felt that the (emerging) Bauhaus student/artist/designer was trained to do this particularly well.

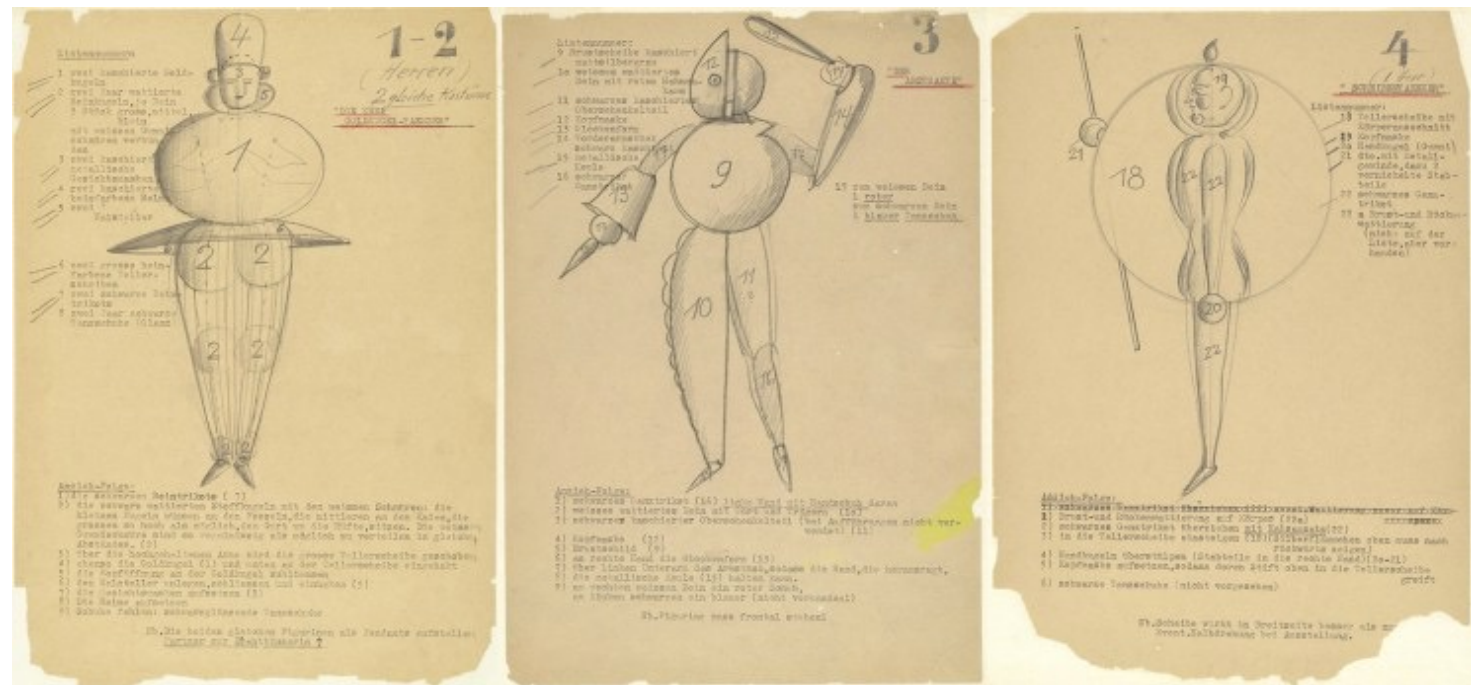
Bauhaus (1919 -1933) – example of developing a master motif

Based at Weimar, Dessau and Berlin

Founders Walter Gropius, Laszlo Maholy- Nagy

the idea of interdisciplinarity and spirituality encompassed in the collaborative work of the early modernist avant-garde was based, Roberts notes (2011:6), on a refusal to compartmentalize artistic and intellectual labour.

(Colin and Sachsenmaier, Collaboration in Performance Practice, p5)



Sketches and movement studies for *Das Triadisches Ballett*, by Oskar Schlemmer, late 1910s



Bauhaus Costumes by Oskar Schlemmer (Bauhaus) for the Triadic Ballet, at Metropol Theater in Berlin. Photo: Ernst Schneider, 1926. (Apic/Getty Images)



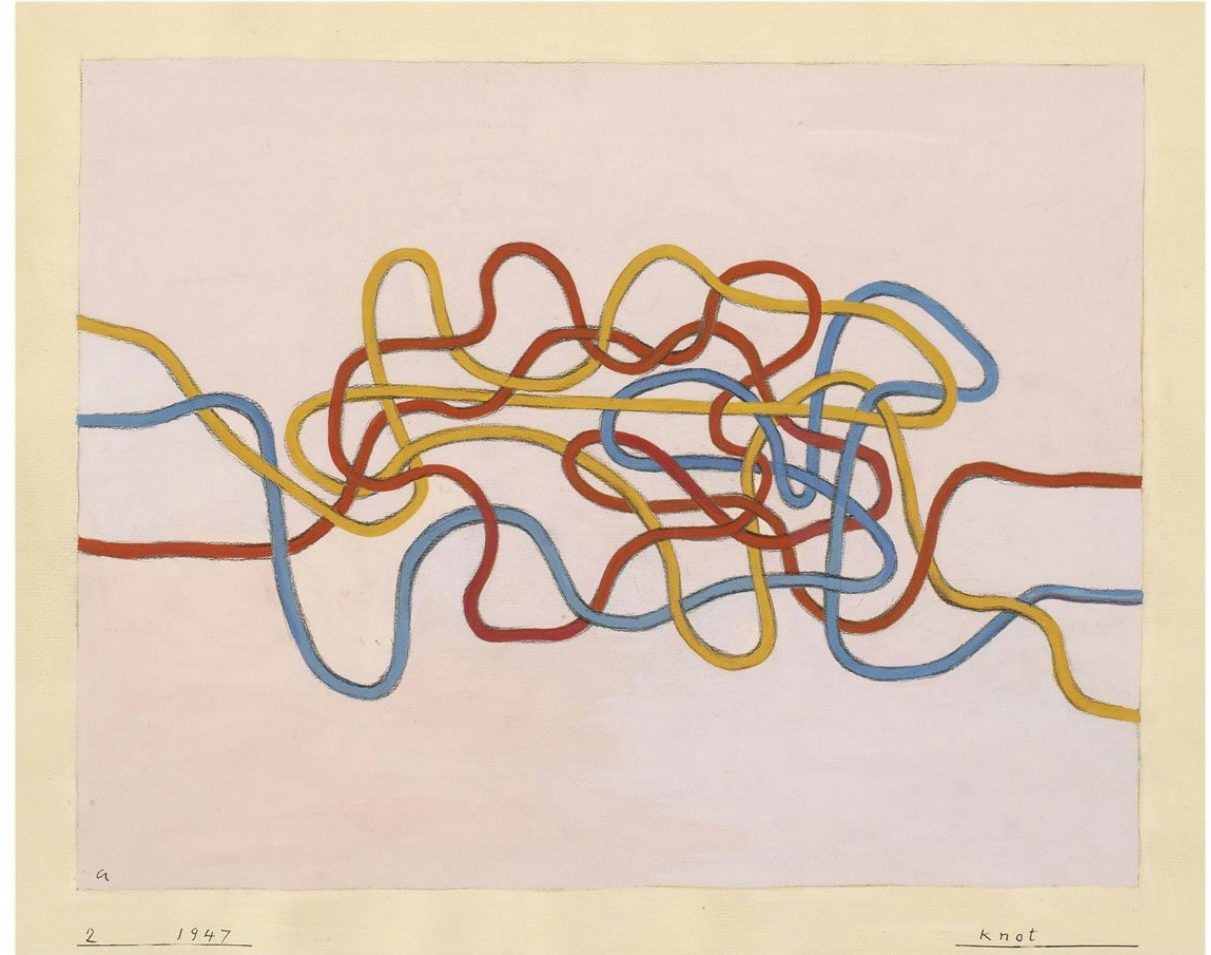
Marcel Breuer was still an apprentice at the Bauhaus when he designed the Wassily Chair, inspired by the frame of a bicycle. The chair, and all of Breuer's work, truly embodies the Bauhaus objective to marry art and industry.

Finding creative inspiration in collaboration.

The Bauhaus brought together masters from different fields. They learned from each other and inspired one another. They were keen to improve and evolve their craft by rubbing shoulders with those who had different perspectives and experiences. Naturally, this also led to creative tensions between some Bauhäusler, but it was a price worth paying, as the Bauhaus' enduring legacy shows.

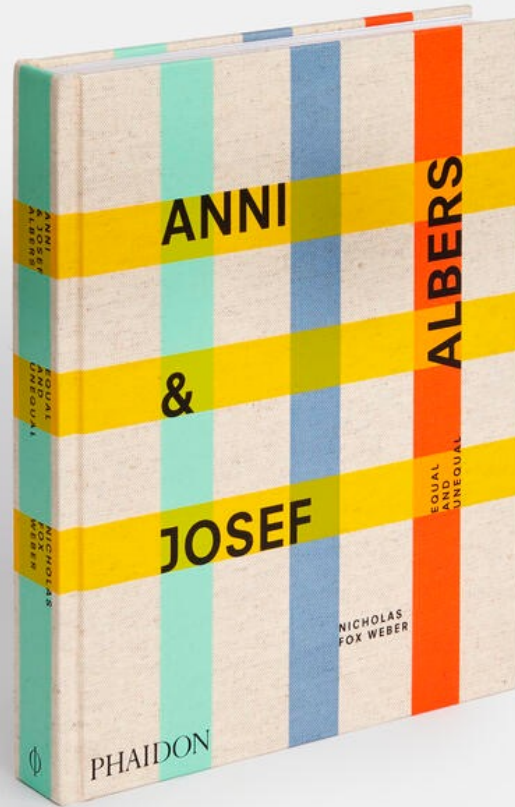
Jens Riegelsberger, UX Director at Google, currently leading UX strategy, operations, and infrastructure

Anni Albers (1899-1994)



Albers redefined thread-making with unconventional components, and reinterpreted mathematical theories and ancient texts with new technical weaving. She used weave as a discipline which intersected with art, design and architecture, combining writing as part of her multi- disciplinary practice.

Anni Albers and Josef Albers (members of the Bauhaus)

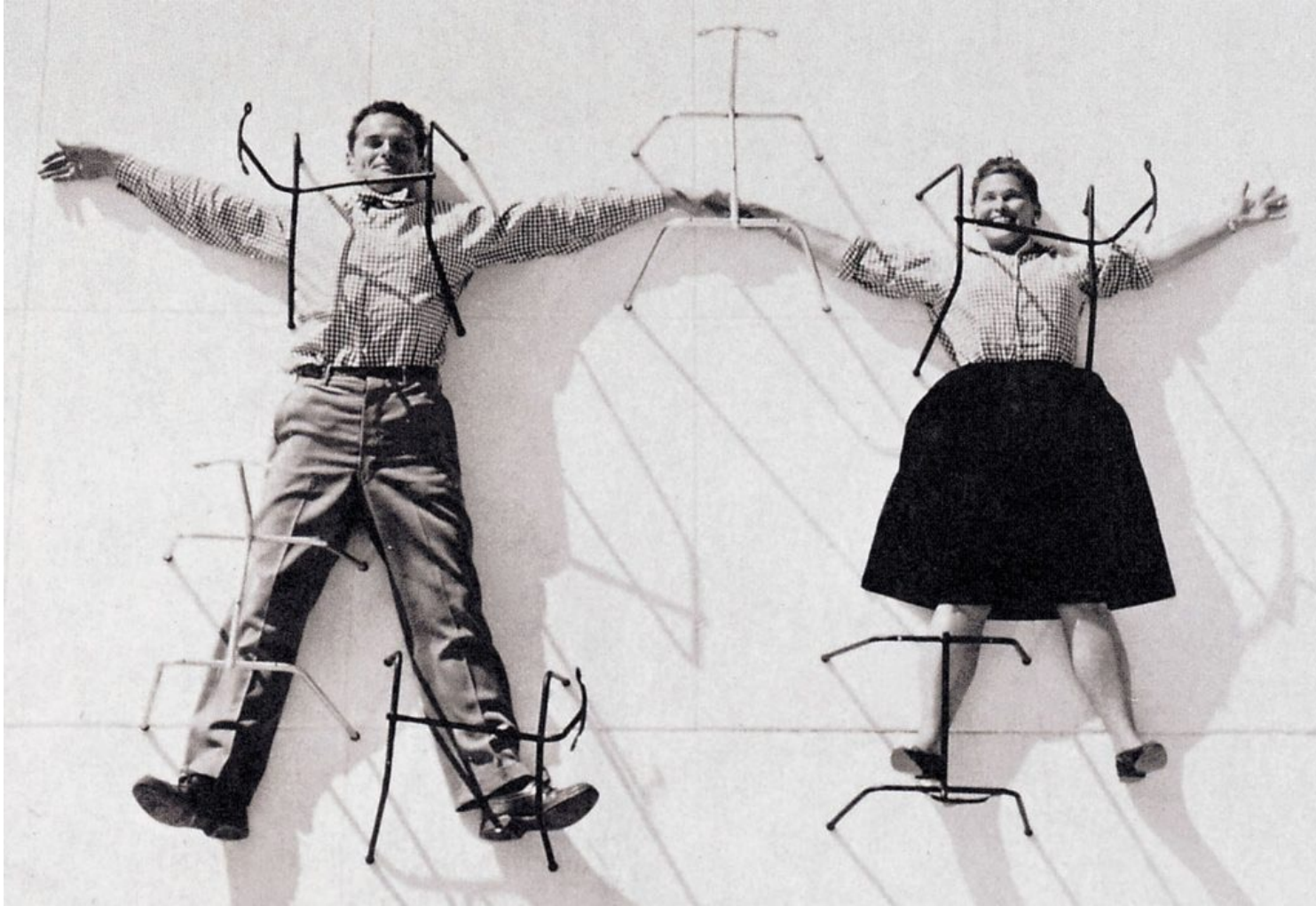


Charles and Ray Eames – the Mid - Century Modern Designer duo.



Design Classics by Charles and Ray Eames

Eames Design - 1933 1965, Mid Century Modern



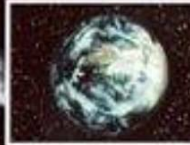
Modern, experimental, wide-ranging: best known for their groundbreaking contributions to architecture, furniture design, industrial design and manufacturing, and the photographic arts.



THE FILMS OF CHARLES & RAY EAMES

VOLUME 1: POWERS OF TEN

Plus 901: AFTER 45 YEARS OF WORKING
A FILM BY EAMES DEMETRIOS



Future Farmers

<https://www.futurefarmers.com/>

Futurefarmers zoom in on "assembly" by asking:

*"Who is part of our assemblage?
Who is the other that co-determines or co-constitutes what is of importance?
What provokes this pre-subjective process of communization?"*

With projects such as Flatbread Society, the Futurefarmers collective focuses on concrete practice. They conduct hands-on exploration of how people and things, neighbors and grains effect each other...



AMY FRANCESCHINI
San Francisco, USA

MICHAEL SWAINE
Seattle, USA

LODE VRANKEN
Gent, Belgium

STIJN SCHIFFELEERS
Gent, Belgium

ANYA KAMENSKAYA
Oakland, USA

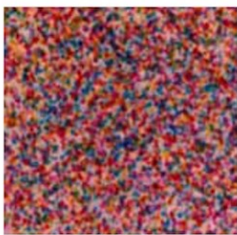
DAN ALLENDE

A Variation on Powers of Ten
2012

This project is a response to the short film, Powers of Ten by Charles and Ray Eames and commissioned by IBM in 1968. One iconic image from the film depicts a man and woman picnicking on a blanket. This scene is the starting point for a zoom-out to a field of view the size of the observable universe, 10^{24} . The camera then zooms back to the picnic, into the man's hand, until it arrives at quarks - the edge of our current understanding- at 10^{-15} . Looking back at the film, we became entranced by the presence of the narrator, Philip Morrison, the production of the film and the very short time spent at the human scale. A Variation on Powers of Ten, uses the opening picnic scene as score to guide 10 discussions. Like the stage of a microscope, the blanket became a stage where the act of inventorying and recording is the content of the work. Books, journals, food and a location were recast and became cues pointing back to the film and forward to each researcher's own work.

<http://www.futurefarmers.com/projects/powersoften>





14



15

THREAD 11: REPRESENTING THE UNSEEABLE

The Eames, having no way at the time to see subatomic particles, photographed television static and hand colored it to illustrate 10⁻¹⁵. We imagined it in dance.

Futurefarmers with students at the Massachusetts College of Art in 15

THREAD 12: SENSE OF SCALE

"What we were not quite emotionally prepared for was the sense of heat on the face as though the noon-day sun had appeared across the cold desert morning. That was a thing I shall never forget, the visceral sensation of the heat of the bomb on one's face at ten miles' distance. To me, that was much more important than the flash or even the rumbling thunderous sound that came and echoed among the mountains a minute later. The real point was that sense of direct, intimate contact through the warming of the skin. And that's one memory I have most of all. But of course, we were all awed and silenced by the extraordinary power of this thing which we had understood in, in the numbers, but not in, in, in true experience."

—Observation by Philip Morrison, one of a small group of people who witnessed the explosion of the first atomic bomb in Los Alamos, New Mexico, in 1945. From *Dawn*, episode 101 in the series *War and Peace In the Nuclear Age*, WGBH Boston, 1986.

THREAD 13: SYMMETRY OF IDEAS

The home of Philip and Phylis Morrison, in Cambridge, Massachusetts, was also full of books from floor to ceiling. Because he reviewed books for *Scientific American*, they received thousands of books every year, and sometimes they would receive more than one copy. Their daughter-in-law, Angela Kimber, pointed out one of the shelves that Phylis organized on symmetry – an entire shelf of books on the subject of symmetry with pairs arranged symmetrically, mirroring each other left and right. "E...D...C...B...A...A...B...C...D...E"

printer to delete background, square up book and add shadow. shadow along the right edge and bottom of each book. 2 points in thickness



16

17

18

THREAD 14: THREE BOOKS, TWO MAGAZINES

There were three books and two periodicals on the original Eames blanket. We imagine that Philip Morrison chose them.

The Voices of Time: A Comprehensive Survey of Man's Views of Time as Understood and Described by the Sciences and the Humanities, edited by J. T. Fraser, 1966

Time, by Samuel A. Goudsmit and Robert Claiborne, Life Science Library, Time-Life Books, 1966

Earth Photographs from Gemini III, IV, and V, Scientific and Technical Information Division, Office of Technology Utilization, National Aeronautics and Space Administration, 1967

From the forward of the book:

"The early Gemini flights have shown that man is particularly well suited to perform the scientific investigations conducted in space. He can act as a sensor to observe, monitor, and adapt his own observations. He can also evaluate data and manipulate instruments and equipment. He is able to respond creatively to unexpected phenomena and to improvise."

1. *Science*, 27 August 1976, Vol. 193, No. 4255
2. *Scientific American*, September 1976, Vol. 235, No. 3 – Food and Agriculture Issue



19

20

printer to delete background, square up book and add shadow. shadow along the right edge and bottom of each book. 2 points in thickness

THREAD 15: GOD'S-EYE VIEW

We came to geographer Jake Kosek at UC Berkeley through a student, Charlie Dubbe. Charlie explained the wonders of Jake as a teacher: "One of the best moments of learning I've had at Cal was when Jake was talking about the illusion of objectivity. We were talking about it in the context of science, and how science is becoming a type of new religion that people have blind faith in. Jake told us how Donna Haraway writes that scientists often adopt a sort of false 'god's-eye view,' pretending they can separate themselves from their position in the world. To illustrate this, Jake got up on his desk and started walking across the tables, gingerly avoiding people's hands and notebooks. 'This is what the god's-eye trick is,' he explained. 'They describe the world from above, from the 'god's eye,' without situating their knowledge as from their unique perspective on the world – which, in science, is mostly from the perspective of a white male.'"

THREAD 16: ON OR OFF THE BLANKET? DOUBLE EXPOSURE

Dear Amy,

I certainly have been thinking a lot about this, and have come to a point where I am not sure what to say. For the immediate situation of buying the books, I do not think you should worry. I would think that I have the books or magazines that would end up in my choice of tableau, even when, as outlined below, I am not decided about what that would be.

My hesitation comes from lack of clarity about your own idea of what you are doing with this, and my position within the series of re-enactments that you are doing. Depending on what is intended, I would choose different items.

Most of what drives my questioning comes really from questioning the original images (or the image you sent), their place in time and in the history of what I have been engaged with for the last fifteen years or so, i.e. the place of science in our culture, the obsession with space as the only dimension to attend, and the role of the scientist (through the lens of "the media" writ large) in the public perception of both. So I would have some questions:

Am I to be placed in the position of that guy lying on the picnic canvas? The implication is that this is a "common folk," an informed "middle-class ..."

Ich (Ignacio Chapela)

THREAD 17: RIGHT BRAIN/HANDS AND LEFT BRAIN/HANDS

"... the tension between the right and the left hands, between the reasoned, analytic, logical, unadorned, and clear; and the intuitive, aesthetic, playful, charming, and imaginative. It is to be hoped that we can devise materials which will allow the left hand into school science." –Philip Morrison, *Tensions of Purpose*, ESI Quarterly Report, Educational Services Incorporated, Spring/Summer 1966



21

Philip Morrison in 21 examining the way instruments change how we perceive the world

23

The Powers of Ten

22

Further collaborations include...

Forensic Architecture
Eames Design
Future Farmers
They Are Here
Raqs Media Collective in 2003
Morph Collective
Assemble
Plastique Fantastique
Memphis
Heatherwick Studio
The Designers Republic
TEN Textiles



Assemble

London Based Multi- Disciplinary Collective working across architecture, design and art.



We were really just having fun and experimenting for ourselves,[.....] to be able to say that you authored something individually would have gone against the way in which the work had come about. I suppose it has got something to do with the hierarchy of the broader architectural world, because we were all indoctrinated to believe that we couldn't have a voice because we were, at that time, too inexperienced.

Assemble began as a small group of architecture students at Cambridge University.

Expanded to a group of approximately 20 anonymous members.

Made their name with the creation of *The Cineroleum* (2010): the reclamation of a disused petrol station on Clerkenwell Road that became an outdoor cinema



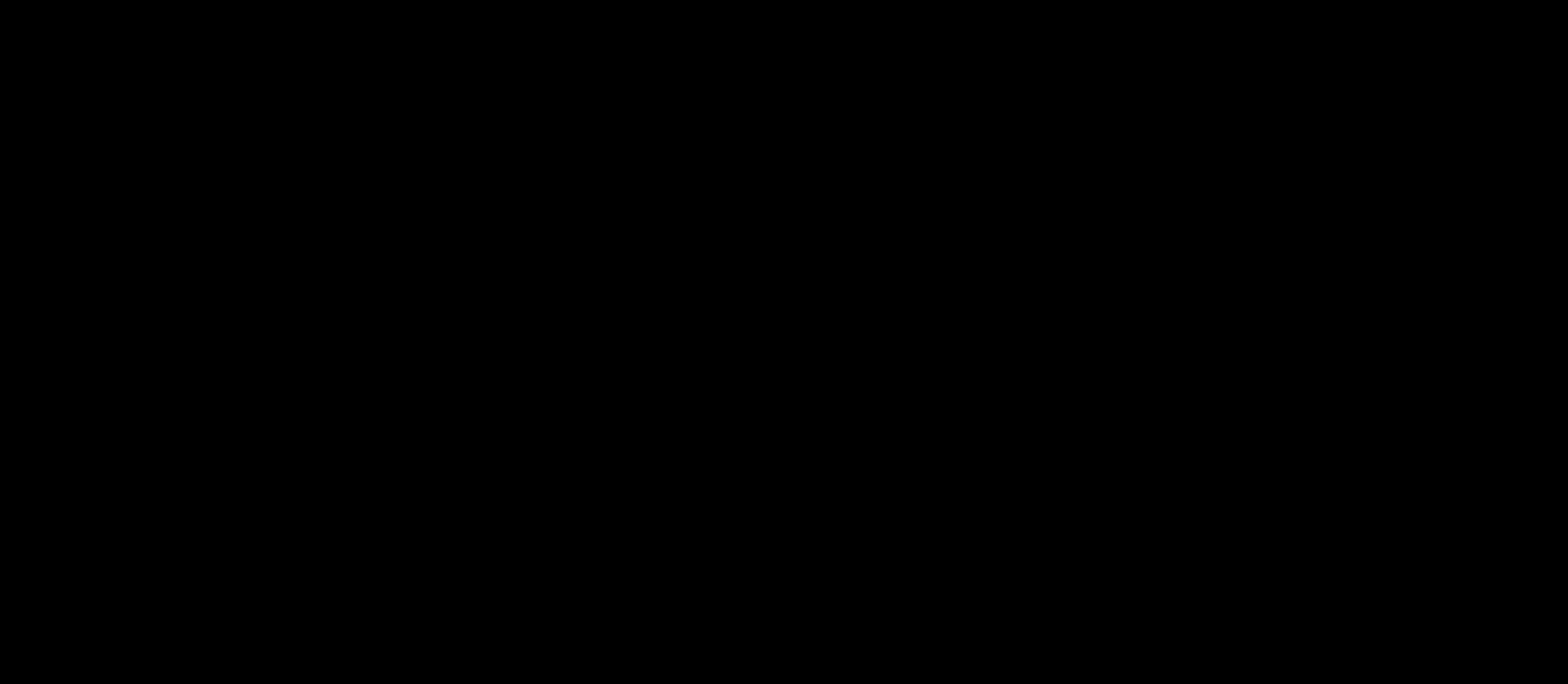
Olafur Eliasson's project
"is meant to encourage
teamwork and dialogue
between people from
divergent social
backgrounds"

(Moffitt; 2017)

Olafur Eliasson's project,
installation view, Central
Pavilion, 57th Venice Biennale



Olafur Eliasson - Civic Engagement and Integration



The Designers Republic - Thinking and doing.

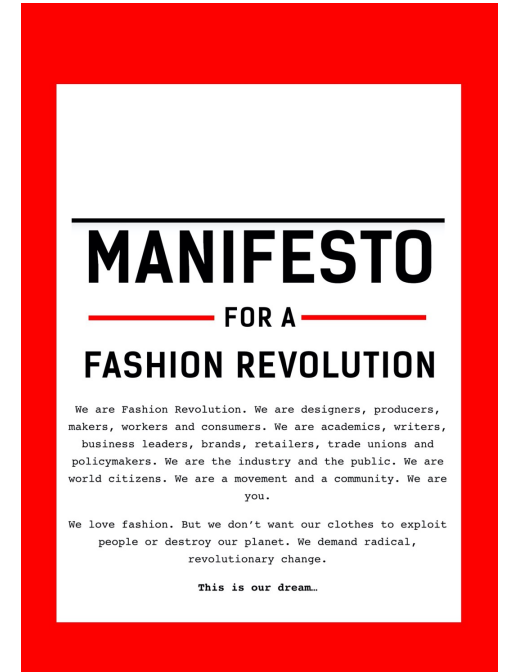
<https://www.thedesignersrepublic.com>



The Designers Republic was a renowned graphic design studio based in Sheffield, England. It was founded by Ian Anderson in 1986 and **gained prominence for its distinctive and innovative graphic design work, particularly in the field of electronic music and album cover art.** While the core team consisted of a few key members, tDR often collaborated with a rotating cast of designers, artists, and contributors on various projects.

Their work, **characterized by bold typography, vibrant colors, and futuristic aesthetics, had a significant impact on the visual identity of the electronic music genre in the 1990s and 2000s.** The collective was known for its collaborations with music labels, including Warp Records, and iconic designs for artists such as Aphex Twin and Autechre.

Storytelling is a vital part of our work and has taken a tangible form in our best-selling Zines, covering everything from living wages to mending. Within these pages, we explore each topic through illustration, poetry, photographs, interviews, articles and interactive games.



Archival Zine covers, poems, and illustrations **designed by our Global Network**,

An exhibition takes you on a journey to become a Fashion Revolutionary. It follows the environmental and human problems inherent in the fashion industry, maps out creative solutions and charts a course for change. You too will be transformed, and empowered to take action along the way. At the end of the exhibition, we encourage you to respond to the questions posed by each display in our global conversation map.

To find out more about our work and get involved with your country team, head to <https://www.fashionrevolution.org/>

Collaboration in Design:

Collaboration in design refers to a more interactive and synergistic process where individuals work together to achieve a common goal.

It involves a shared vision, mutual respect, and an understanding of each team member's expertise. Collaboration often implies a deep integration of skills and perspectives to create a unified outcome.

In design, collaboration might involve professionals with different specialties, such as graphic designers, UX/UI designers, and developers, working closely together to produce a cohesive and well-rounded final product.

<https://www.youtube.com/watch?v=A49FQZwgDdQ>

Design Research Tools - a long collaboration (recap- EXPAND)

Aims

Since 1996, TED has been developing and refining a set of sustainable design strategies for textile and fashion designers.

These strategies have emerged out of a need for a toolbox for designers to help them navigate the complexity of sustainability issues and to offer real ways for designing 'better'.

While the environmental impacts of our production and consumption system have become increasingly discussed and brought to the fore, and textile/fashion designers have begun to consider their responsibilities as creators of unsustainable products and systems, there have been few tools or frameworks for designers to be pro-active.

We became frustrated by the lack of real action in light of these often depressing facts, and wanted to create some strategies for positive change.

These have now become The TEN and are continually changing and adapting.



Collaborative Performance

Boss Morris



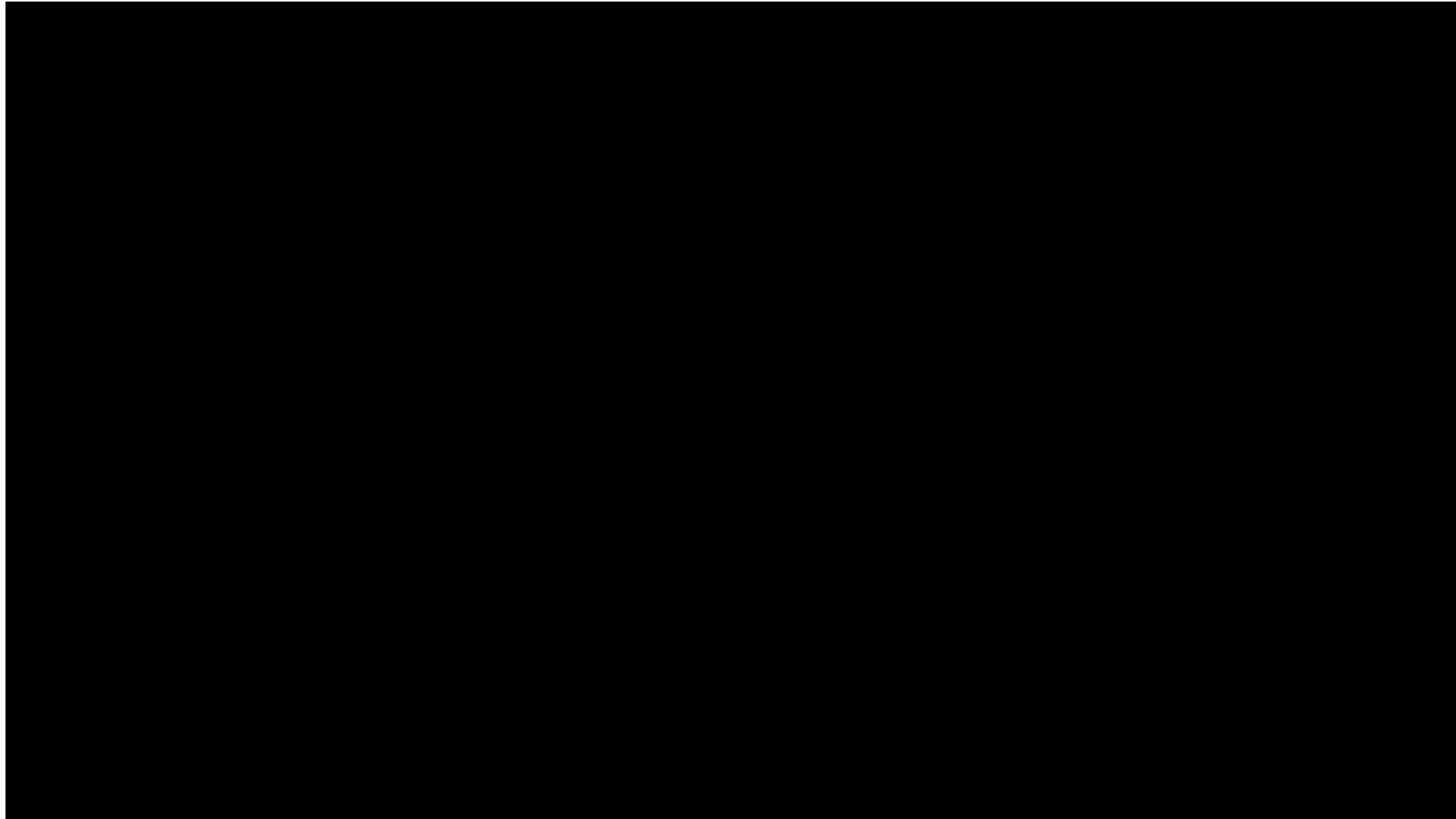
Founded in 2015, Boss Morris is a group of female creatives supported by professional musicians who share an artistic and progressive vision of morris dancing as a means to increase social engagement and interest in this unique and ancient folk dance. <https://www.bossmorris.com/about>

and exhibition outcomes..... Boss Morris – Hidden Notes Festival, Stroud
23rd 24th September 2023



TED (Textile Environment Design)TEN Textiles (1996)

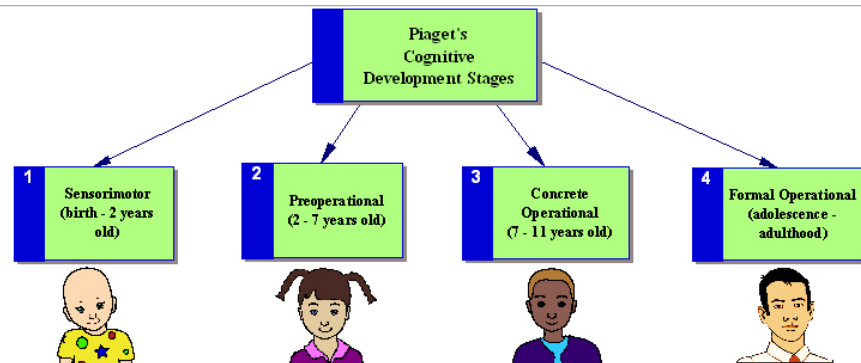
a practice-based sustainable design group of researchers,
exploring sustainable materials, relationships, and circular design
processes



Transdisciplinary

Coined by Jean Piaget (1896-1980) and others in 1970, to “express the need for a knowledge that transcends the limitations of interdisciplinary collaboration”

- a meta-level of understanding
- a unity of knowledge
- a vocabulary for speaking and thinking with each other across disciplines in a meaningful and purposeful way.
- Piaget is known for his cognitive development stage theory



Swiss psychologist

Transdisciplinarity has been increasingly used to frame cross-disciplinary research and approaches to complex problems where solutions cannot rely on disciplinary thinking alone.

For example, Climate Change. To understand the context, (data) input including exact sciences, knowledge of human behaviour, politics, economical situations, communication and education are essential. This means drawing from expertise across a wide range of disciplines, separate to your own



https://www.google.com/search?sca_esv=586359844&rlz=1C5GCEM_enGB1036GB1037&sxsrf=AM9HkKk8A_dYbiDhaEGxf3jkUy2eFmRucQ

Examples of Transdisciplinarity, include STEM and STEAM (science, technology, Engineering, arts, Maths)



ATiC (assistive technologies Innovation Centre, <https://www.uwtsd.ac.uk/atic/>)

ATiC collaborates with academic, public, private, and third sector partners from the life sciences, health, and social care sectors to drive a culture of research excellence, knowledge transfer, and innovation in health and wellbeing.

Space and Place – Collaboration in the City. Corporation.

‘Biophilic Swansea’ scheme ‘a first for the UK’



Live briefs - The project will be delivered by Hacer Developments, with Wales’ largest provider of affordable homes, Pobl Group, joining as its residential partner. The pioneering scheme is the result of extensive collaborative working among a range of local organisations, including Swansea University, the Active Building Centre, Public Health Wales, and a number of local community groups. Funding awarded through the Welsh Government Innovative Housing Programme will enable Biophilic Swansea to incorporate innovative technologies and community features, to explore a new way of inner-city housing in Wales. <https://www.poblgroup.co.uk/about-us/pobl-story/april-2021/city-centre-biophilic-swanea-scheme-a-first-for-the-uk/>

Collaborative task (12.00 - 15.00)

- Identify artist(s), idea(s), theme(s), or context(s) which link to your collaboration.
- Undertake further research.
- Collate/edit contextual resources for the collaboration.
- Practically apply/adapt/develop ideas further.
- Meetings tomorrow 14.00/15.00, 15.00/16.00 in Reading Room

END