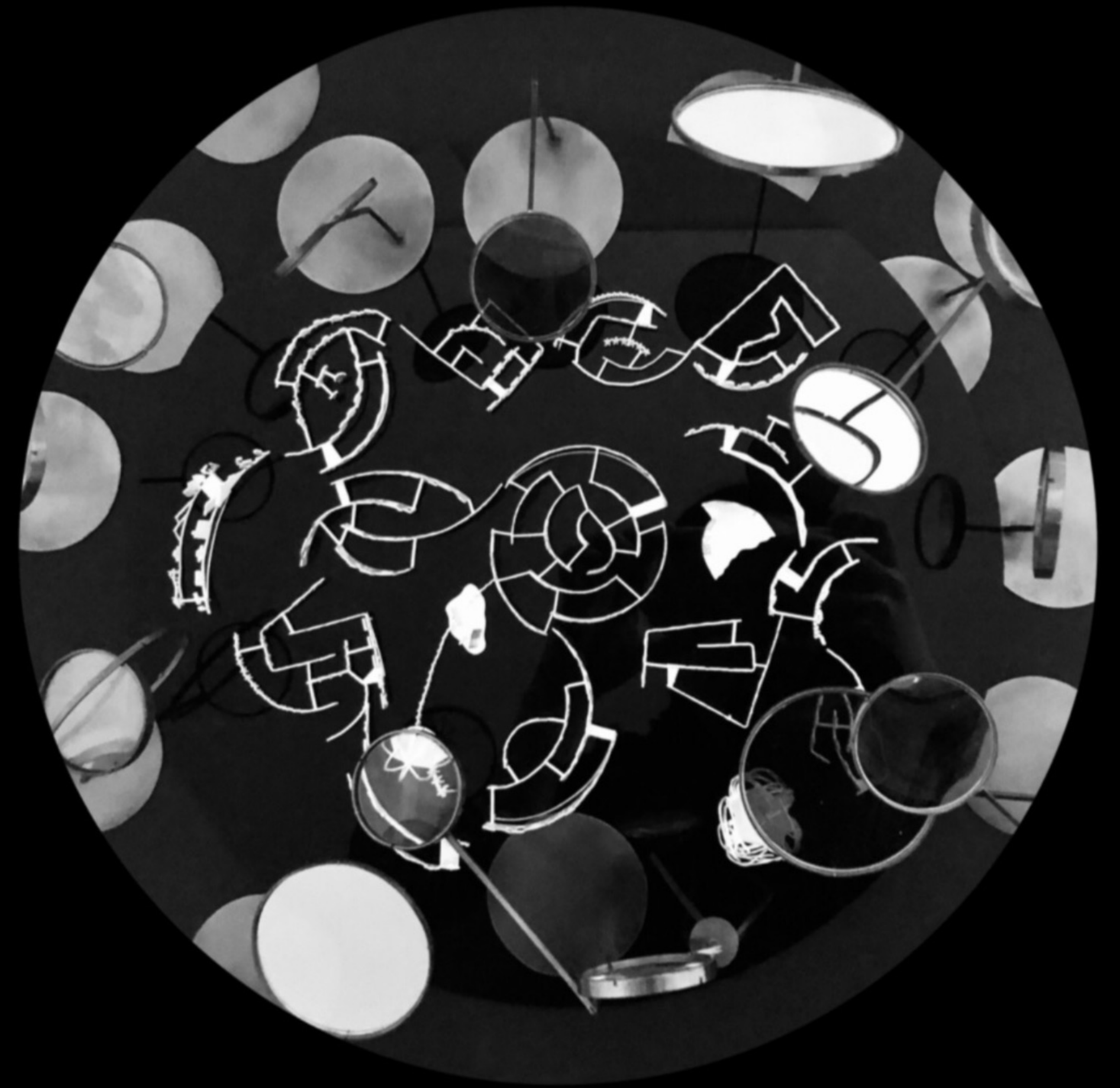


In This Era of Big Data

Those Things We Do Not Notice



Kehan Wan
Yoky

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Those Things We Do Not Notice

MFA Thesis
State University of New York at
New Paltz
Metal Program
2020

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Yoky





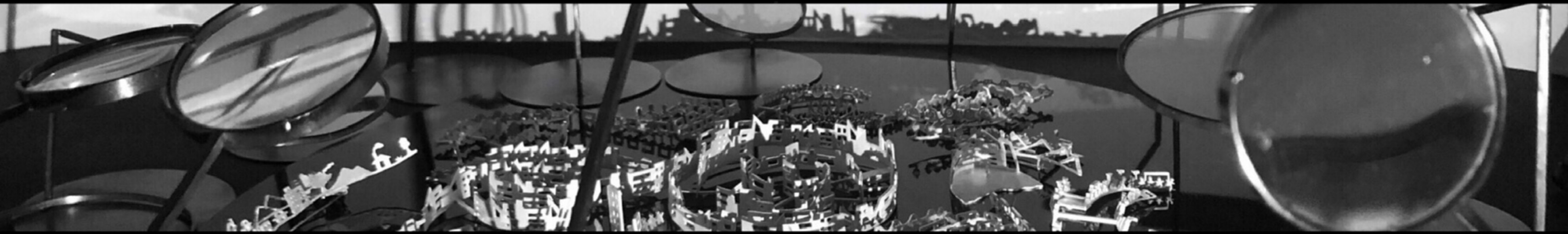
Artist Statement

Dependent upon the internet for all aspects of daily life, we are unconsciously being controlled by data mining and have become desensitized to the security concerns of mass data collection. Through micro-installations and wearable works, I create tactile data bits and visualizations that draw attention to these complex issues. Delicate rows of tiny human figures are arranged to read as text, or the constant stream of recorded personal data. Jewelry pieces are arranged into an aerial installation monitored by looming magnifying lenses. These works invite the viewer to have a closer look, and provoke feelings of invaded privacy, surveillance, and information overload.



Big data has become highly used in our daily life, and we rely on it more than we intended to. However, even with its prevalence in our life, people are still questioning what exactly is big data? The big data cataloged as 5V: Volume, Velocity, Variety, Value, Veracity, play a significant role in this era. This is an official definition of big data, but it's still hard to understand the necessity of big data. Indicated in the book, *Big Data: A Revolution That Will Transform How We Live, Work and Think*, "there is no rigorous definition of big data. Initially, the idea was that the volume of information had grown so large that the quantity being examined no longer fit into the memory that computers use for processing, so engineers needed to revamp the tools they used for analyzing it all" (Viktor, Cukier 6). On account of the 5V, our lives become more effective and convenient: imagine trying to accomplish nearly any task that involves infrastructure, travel, or electronic communication, without it. While collecting data is a massive undertaking, the analysis is where the significance lies – for better or worse. Through a big data analysis system, it can extract and match the information that we need the most according to the data we create. For instance, we plan to travel to another place, the system will help us to analyze the cheapest flight ticket. All the flight statuses are real-time service. We will know when we will arrive in another city and the duration of the flight. Most bizarre is when you might get emails or advertisements from different sources suggesting a range of ideal travel destinations based on searches you have done when you are not even looking to buy a flight. Nonetheless, we cannot deny that advantages and disadvantages exist at the same time.

The effect of big data gathering is that it helps us pre-determine and document many things in our daily life and claims to make our lives much easier. At the same time, it also takes away our privacy. We sometimes are not aware of how our data is being gathered and mined. For example, every time we open our phone all the information starts being captured by the applications that we use.



While we may find it much easier to discover things that we are interested in through targeted advertising, we may not realize that the database tends to choose the things that we prefer and block other information. Is your device locked with only one passcode? The passcode is just one wall to block others from seeing the inside, but the huge databases collect all of our information and bind them together. Have you ever considered the possibility that what we see might be pre-directed by the big databases? Through analysis, the databases know our interests, so all the things we choose are being filtered already rather than by our pure choice.

Our secrets are also exposed to database analysis, as pointed out in the book *Everybody Lies*: "In some instances, there are official data sources we can reference to get the truth. Even if people lie about their charitable donations, for example, we can get real numbers about giving in an area from the charities themselves. But when we are trying to learn about behaviors that are not tabulated in official records or we are trying to learn what people are thinking—their true beliefs, feelings, and desires—there is no other source of information except what people may deign to tell surveys. Until now, that is. This is the second power of Big Data: certain online sources get people to admit things they would not admit anywhere else. They serve as a digital truth serum" (Stephens-Davidowitz 61). We now live in this inevitable situation, in which society must weigh whether the benefits of big data outweigh the loss of our identities and very souls.

From another perspective of living under big data, the info we access is overloaded. As mentioned in the article, *The Age of Big Data*, "Most of the Big Data surge is data in the wild — unruly stuff like words, images, and video on the Web and those streams of sensor data. It is called unstructured data and is not typically grist for traditional databases." (Lohr), which means that instead of analysis samples of data we now have access to all the data. The accuracy of data, however, is still a problem due to the huge volume of information. As we all know, the quickest way to get knowledge is by searching online. People are introduced to various things when they type in the search space. All the info we get is trying to input into our brain, however, our brain works differently than a computer. A computer can analyze all the data, but our brain is good at thinking. Consequently, the massive knowledge we receive might make us feel overwhelmed. Thinking about how we used to search things through books and other physical resources, we take time to read, to stop, to think, and to write. After these processes, we learned new knowledge. We also discover new thoughts at the same time. Searching online with the big data resource indeed saves lots of time, but sometimes it makes us lose our focus. Think of this, if you were trying to find the definition of big data, many other things that are related to this subject would pop up. All the information about big data, databases, and data visualization is searchable at the same time. People click on what attracts them in the first place, then all research becomes complicated because of all the other overloaded data.

In the end, we might have already forgotten what we are searching for at the beginning. Similar situations apply when you are using your phone. For example, when you unlock your phone intending to reply to a message, all the other apps start popping up notices, recommending things you may be interested in. Through the analysis of big data, you may be seduced to click on all the other stuff, and forget to reply to the message in the end. I assess these effects of Big Data, and through my creative work,, I provoke feelings of invaded privacy, surveillance, and the overload of information surrounding us that often goes unnoticed living under the big data.

The purpose of art is to express people's emotions and allow the audience to engage in a dialogue that can resonate beyond the initial object or aesthetic experience. Working in the format of art jewelry, I translate invisible problems into visual language. I combine jewelry and objects into small installations to allow the audience to experience overwhelming information while being under observation. Each of my works is built up from small scale pieces of jewelry and objects. The intimate world I construct allows the audience to feel as they have entered another world and their identities are shifted from observers to participants. Mentioned in the text, *Contemporary Jewelry in Perspective*, "Contemporary jewelry as a kind of visual art practice keeps breaking the limits of what it can be" (Skinner 13). Instead of isolating them into individual pieces of jewelry, I create small installations to express the complex situation people are living under. Each piece represents a bit of data that people create or have access to, and by combining them into an installation, this mimics the gathering of data information. The audience may think they hold the power to choose their preferred jewelry pieces from the installation, but the truth is all the jewelry within the installation is already chosen by the artist. People do not realize that what they are choosing is not their pure thinking, instead, it is already filtered by the artist. These works are simulations of the big data system.





Using code numbers seems to be the way to represent data. My works, however, use repeating motifs or symbols that are common to our everyday life, referring to the rhythm of data collection. The main material that I use is sterling silver. Silver, as one of the precious metals, has intrinsic value that affects the content of my work. The pure white color of silver exudes a cold feeling, referencing the seemingly distant modes of data collection. I cut this rigid material into small delicate pieces, to resemble the effect of fragile snippets of fleeting information. Described in the book, *Info We Trust*,

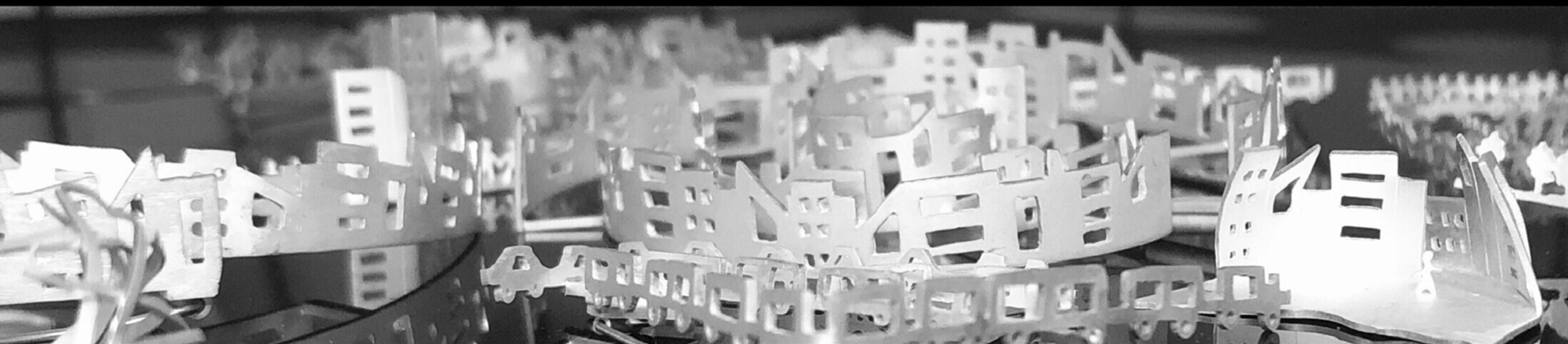
"To choose how data gets encoded in a visual form is to choose the rules for how meaning gets packed into a picture. Encoding is all about building things. It is the most powerful agency we have to help create order from the chaos of our data. But cheeky encoding is not the goal. It does not serve the reader to present a visual contraption that requires painstaking dissection. As data storytellers, successful encoding is not mere witty storage." (Andrews, R J 43).

With a jeweler's saw, I pierce out tiny humans, cars, buildings, trees, etc...from sheets of silver, encoding my illustration of data. They are related to our daily life, hence when the audience sees these elements, they are tempted to imagine themselves as one of the tiny repetitive figures in an infinite stream of data. I choose to pierce out all the elements by hand on account of their individualized appearance. Even though they all look similar, they are slightly different from each other, in this way the audience can imagine themselves being one of the people in my pieces. The whole process of piercing is a way for me to retreat into a place without all the overwhelming information and distractions, and to focus on making one thing. Sometimes people need to find their way to step out of the current status that they are used to, in order to see things clearly. By arranging and assembling all these elements into different installations, my works describe the circumstance that we are unaware of, and how much personal information we willingly give up to be analyzed by big data.

In the piece, Peeking the World, I created several brooches and objects and assembled all elements into one small installation piece. Each piece is hand sawn from sheet metal, hence, they appear as a single line from the side that allows me to create a maze pattern effect. On the outside of the tiny world, I created and set up different lenses which include magnifying and two-way mirror lenses. All the lenses encircled the tiny world. The combination of fragility and the scale of this miniature world gives a sense of domination by an external power. From the bird's-eye view this installation appears as a maze pattern, which creates a sense of being trapped in the tiny world through the lenses. Audiences are invited to look through the lenses so they can see the whole world from different angles and with more detail. At the same time, I will set spy cameras to record all the visitors to give the sense of being watched while they are watching the miniature world. This will bring the feeling of being watched by the huge power behind the view. The miniature-like elements create a playful feeling that people can rearrange the world themselves.

Rachel Elizabeth, an area writer reviewed the "Small World: Miniature in Contemporary Art" at the Fleming Museum of Art and pointed out "If working in miniature allows the assertion of control, it follows that the form is also well suited for commentary on chaos." (Rachel Elizabeth Jones). As big data can analyze and record all information, this format can give a sense of being observed and have the power of controlling. Within this maze, it is important to note that all elements I created are almost the same size as the people are as tall as the buildings. Similarly, in the case of data analysis, the information does not have any scale but is instead virtual and nonphysical.

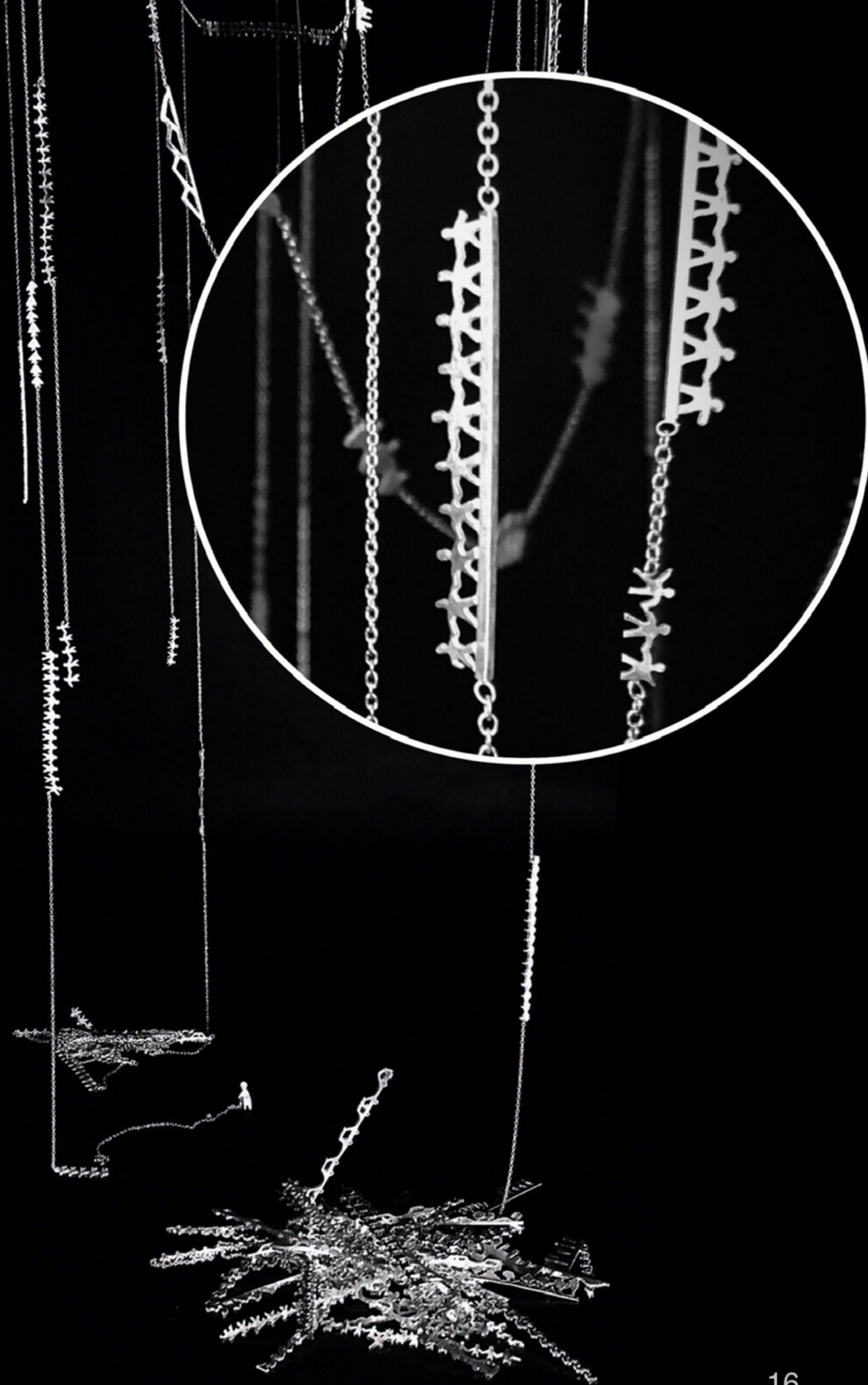
In another installation piece titled, Encircling, I used the repeated motif patterns and connected them with very thin chains to mimic massive data info. These delicate streams of data are suspended without a specific arrangement. Chain drips pile at the bottom surrounding one tiny person who is standing within the chaos of visual data I create.



This piece creates a sense of overloaded and overwhelmed information that we encounter at present. The person is encircled by all the information and has no idea what to do.

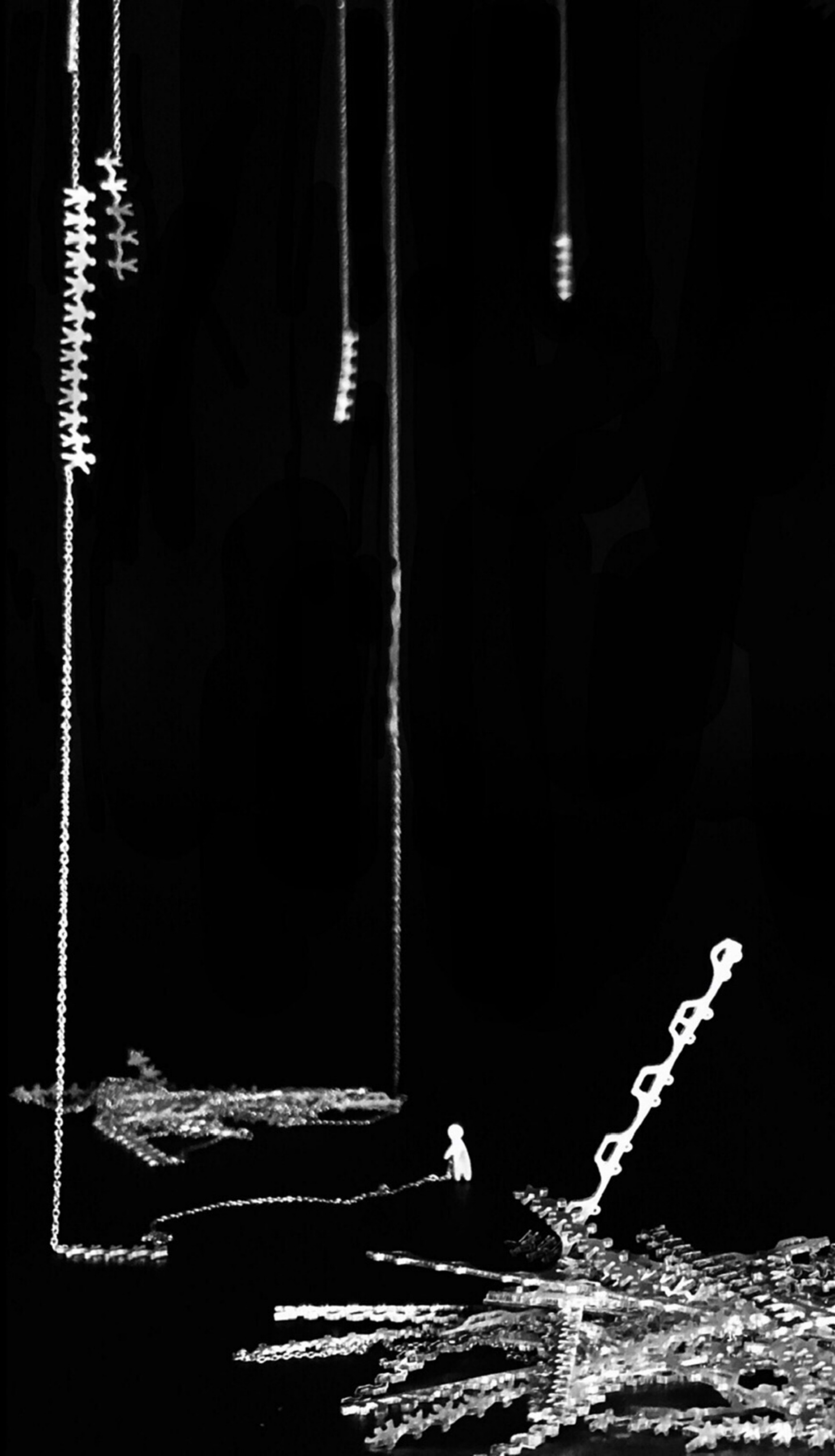
Furthermore, in expressing big data, creating text and data visualizations communicate this complicated information more clearly. Therefore, my other series of installation is using all the elements I incorporate in my previous pieces and transferring them into a readable language as a poster or infographic. As stated in the book *Info We Trust*, "When we create a statistical chart, we intuit that there is something magical about arranging data into forms that can be seen." (Andrews, R J 14). I rearrange my handmade data elements into a text form and present them on A4 paper as seemingly readable words on a page. In the middle of the text, all the data falls and becomes a chaotic data pile at the bottom of the paper. Meanwhile, through another work, I pierced all the tiny humans from one rectangle sheet of silver, all connected within one sheet metal. I then cut several of these dense sheets, connected them as a long strip, and attached them to a minimal printer head I created. This piece references the receipt format, printing out the data we create and consume in our daily life. In this way, the audience might be more clear about my works trying to express the mass/overwhelming scale and variety of data encircling us.

Jewelry has a long history as a symbolic and decorative object upon the human body. Adornment invites viewers to read and respond to objects when they are worn. The author and art historian Liesbeth den Besten state that jewelry is usually seen or recognized as a sign, people tend to dig out its meaning, stories, and memories spontaneously. At the same time, the meaning can change based on the wearer (den Besten 24).

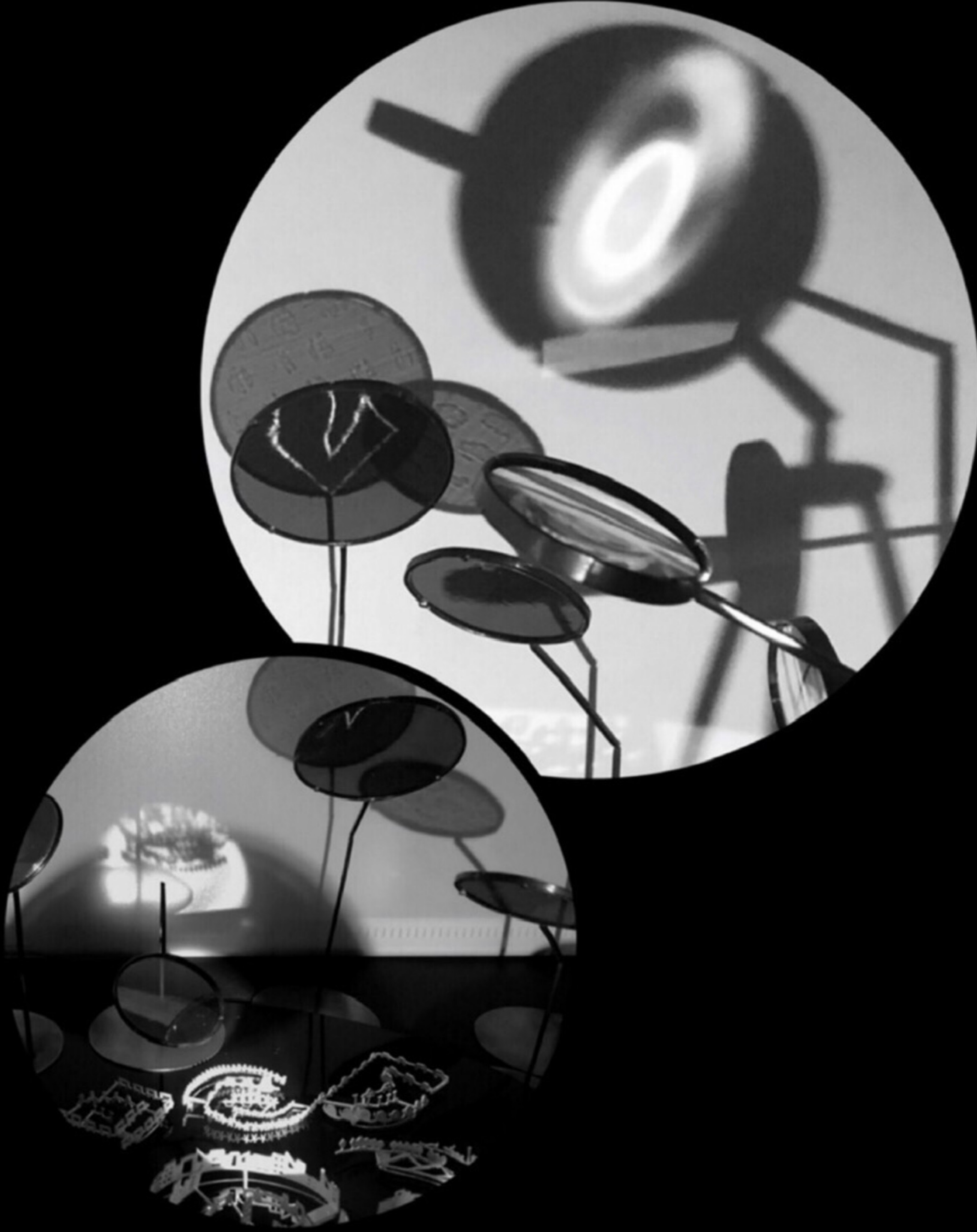


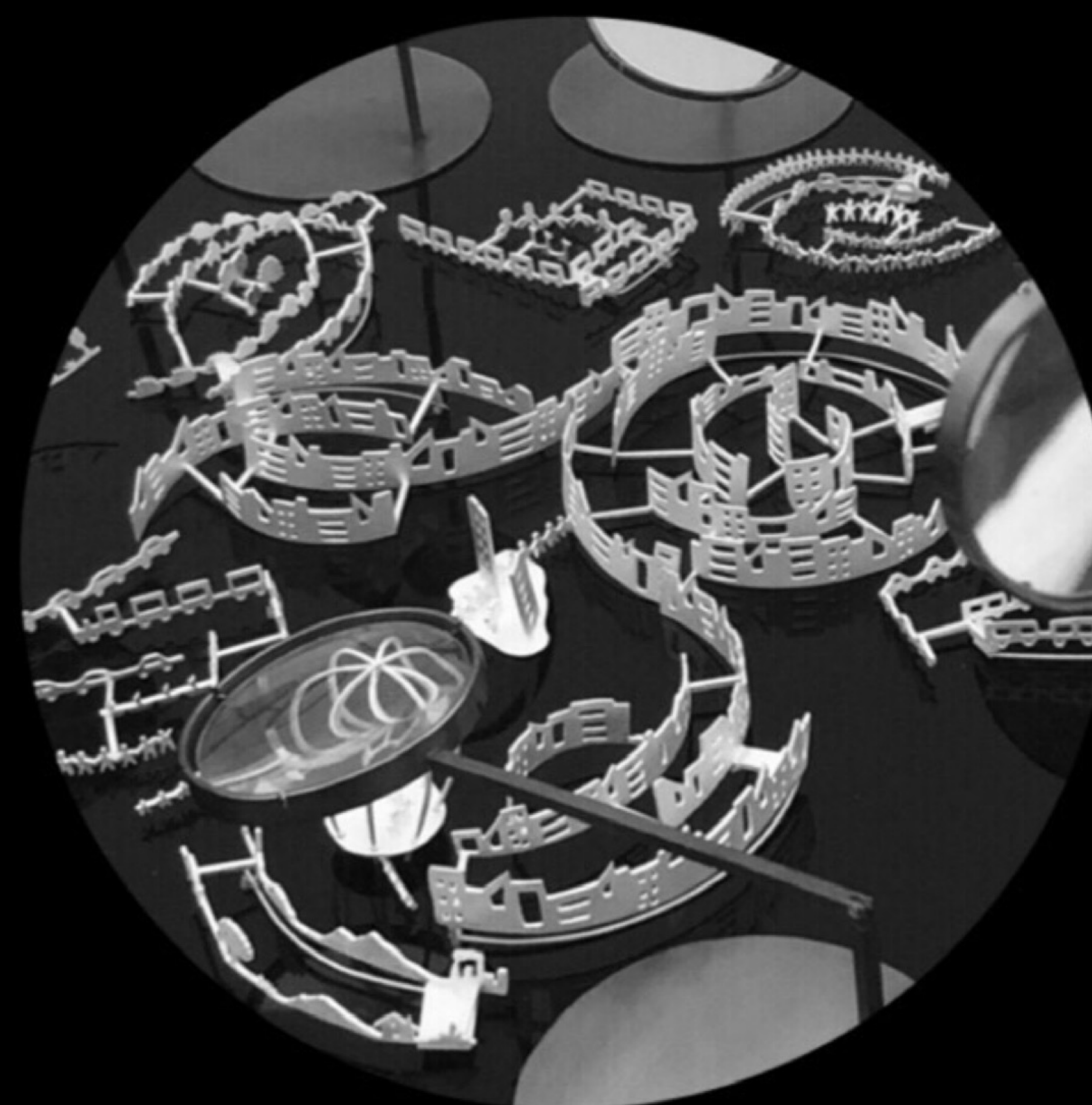
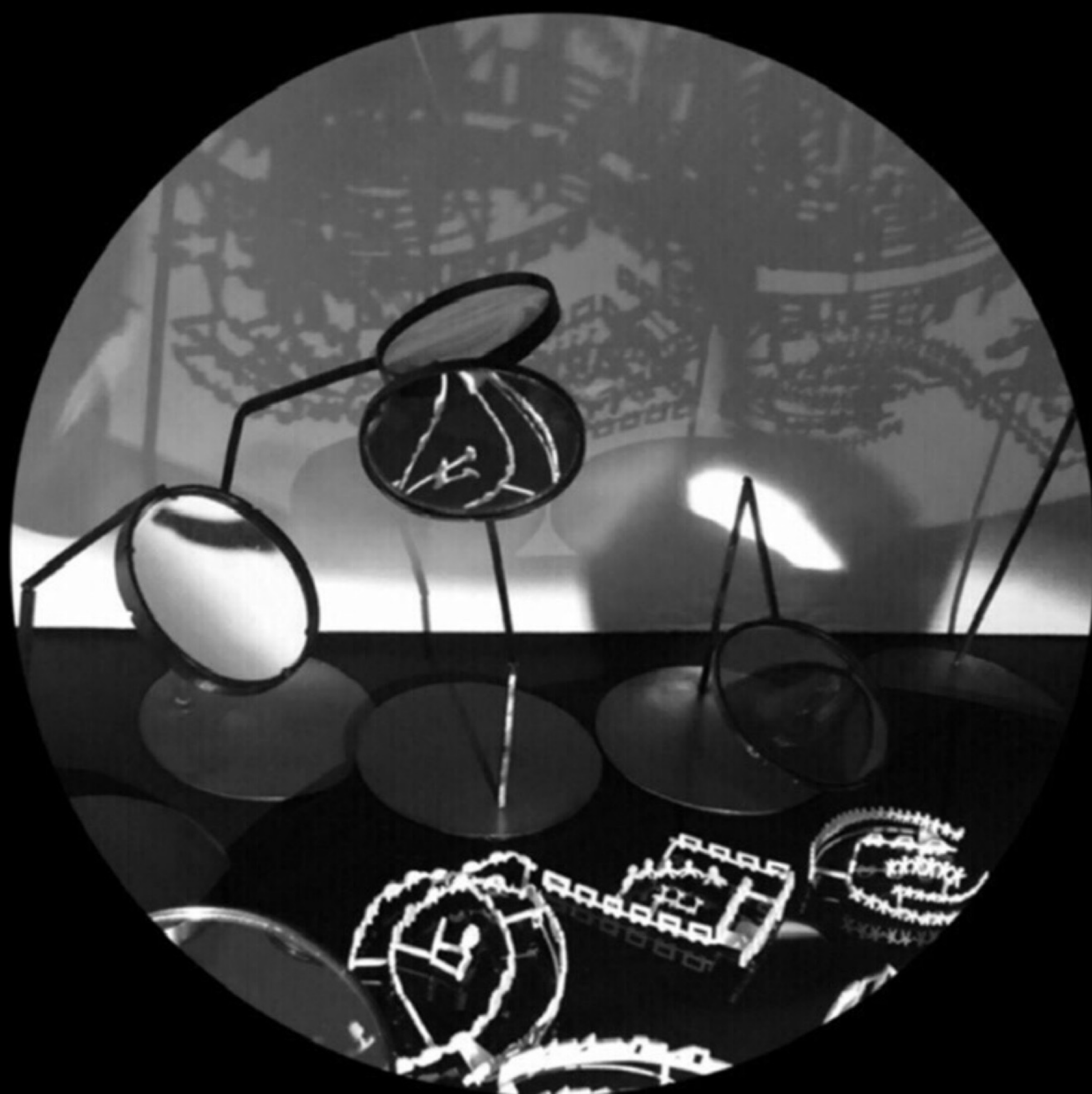
When my works are shown in the gallery as an installation piece, they create a feeling of lacking privacy and information overload while the wearer, instead, presents my works as the chosen data information. The piece they choose becomes a visible sign at the same time. Art jewelry, as one of the art languages, utilizes the body as a site, and uniquely builds a connection between the artist and audience. When an art piece is touchable, it is one of the ways that draws people's attention and is aware of the existence of things. Therefore, jewelry has become a language that people can wear and showcase during their daily life.

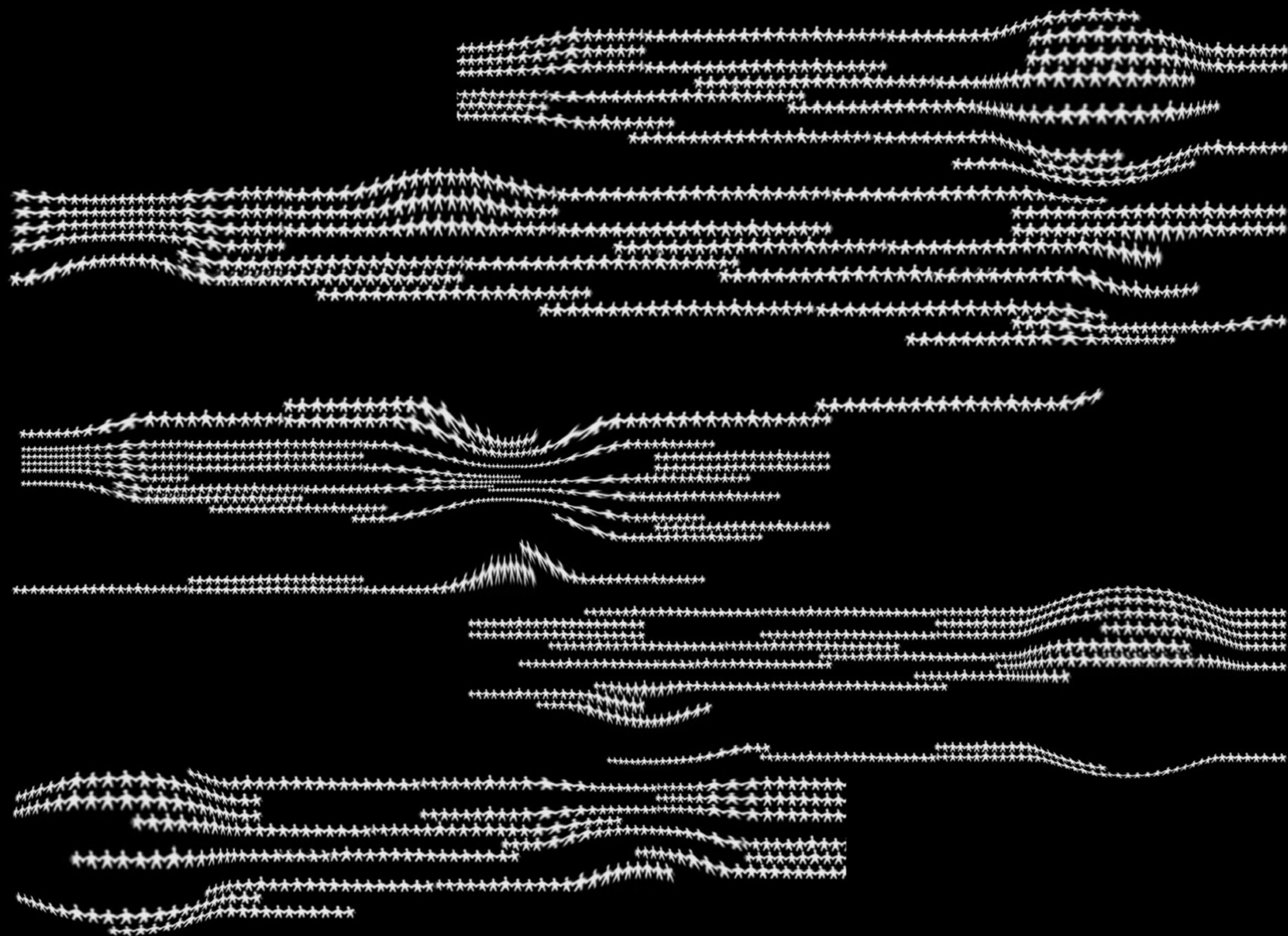
My research exposes the impact of big data, and this drives the content of my work. I develop the form, format, and presentation to highlight this subject matter. Through three different series of my work, I express data as visual language and create a physical connection to the issues presented by data collection and analysis. Big data's lure of efficiency must be scrutinized. Consider the downside: our privacy is being eroded and our every move is being marketed to other enterprises who prey on our resources. However, even though a simple internet search seems private, it reveals our actual thoughts; the data is gathered and sold to others who further capitalize on our most personal impulses. My work intends to point out this situation that people do not notice and allow the audience to start to consider the problem. I insist artworks provide stronger expressions than the text itself. Jewelry brings art into people's lives, the art itself doesn't exist as a single object but builds a connection with humans. Living under the era of Big Data is inevitable and we cannot deny its benefits. It is important to remain conscious of the negative impacts so that we can think for ourselves rather than be led by the analysis system. In this era of big data, it is time to highlight the things we do not notice.



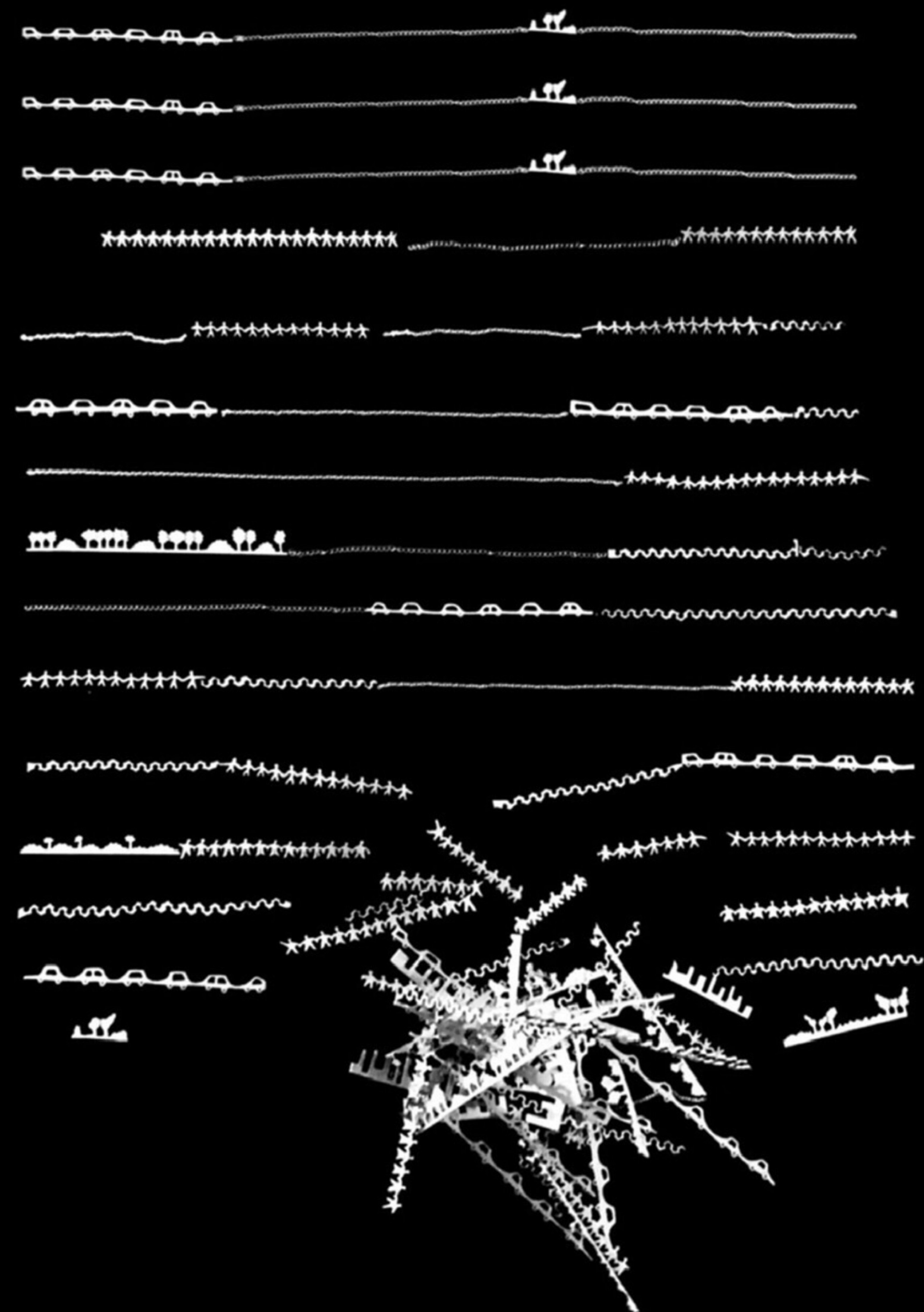


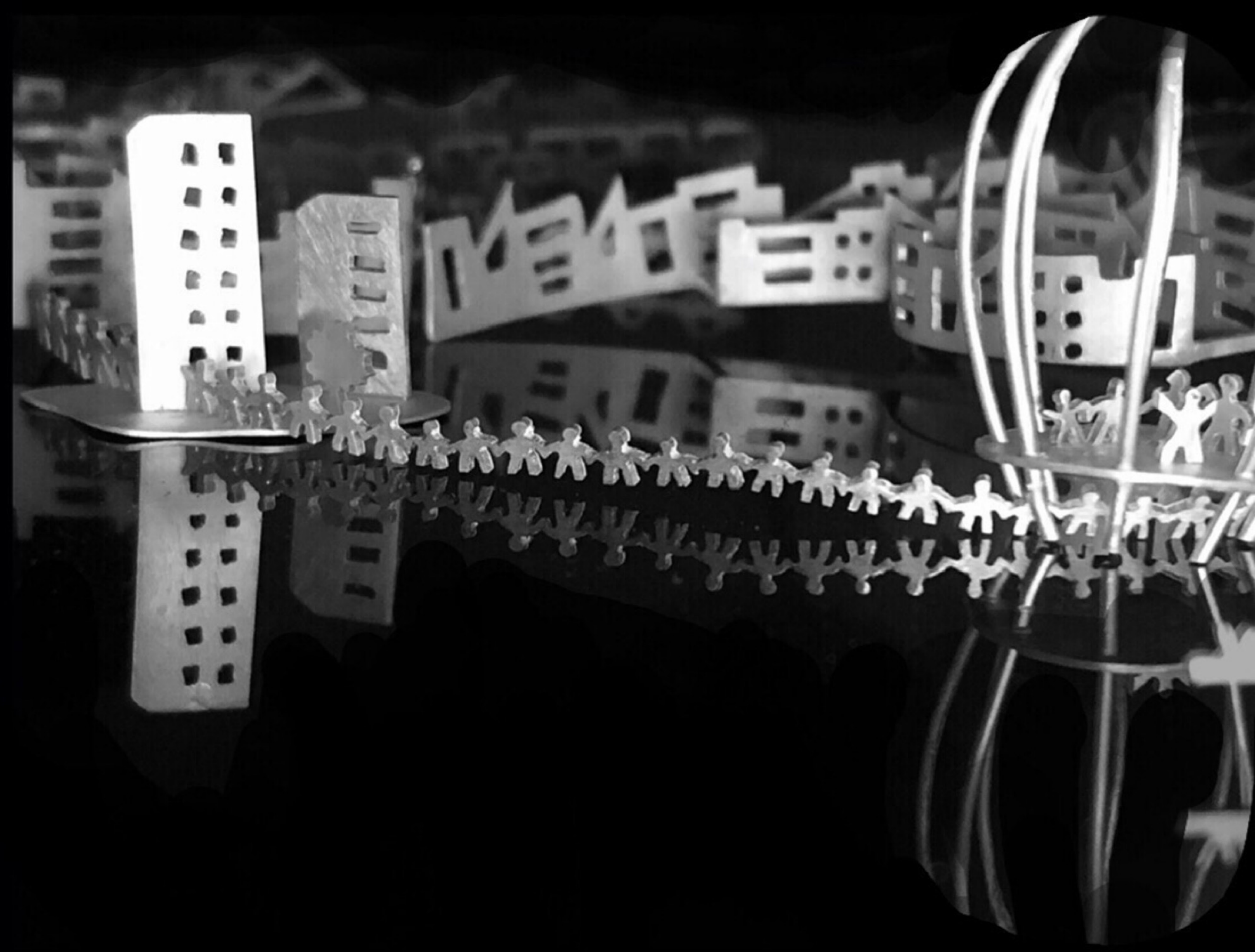
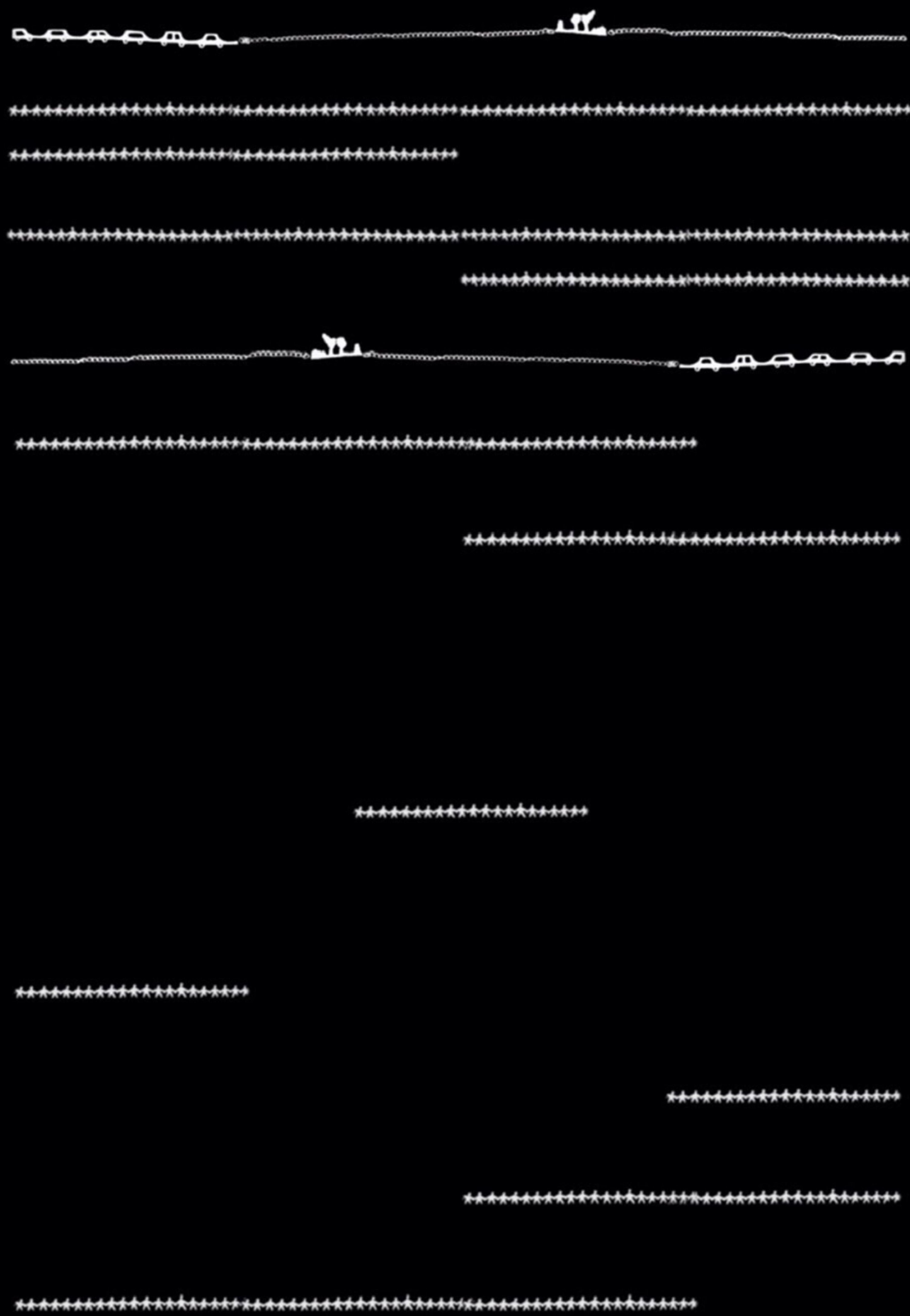


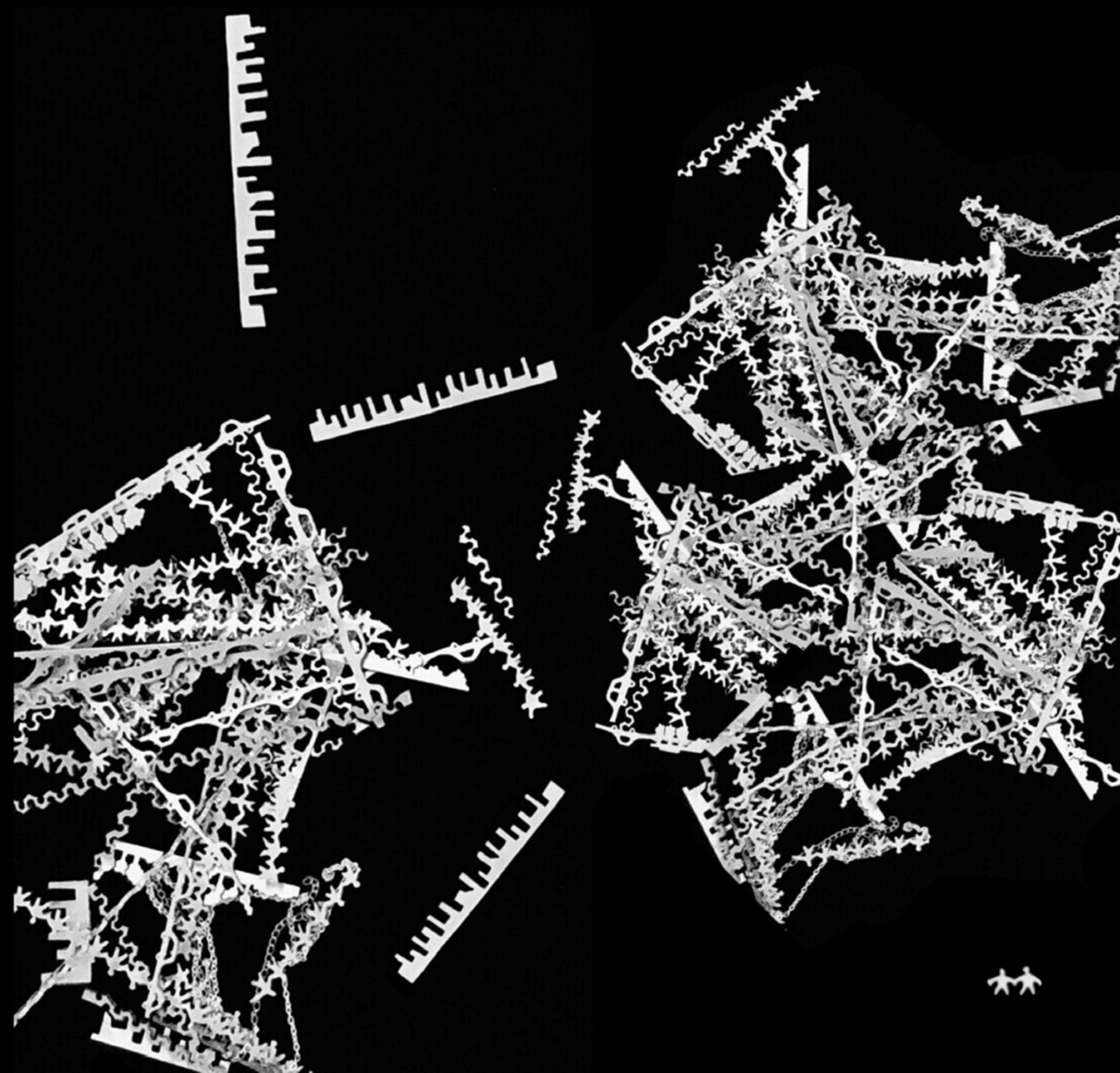
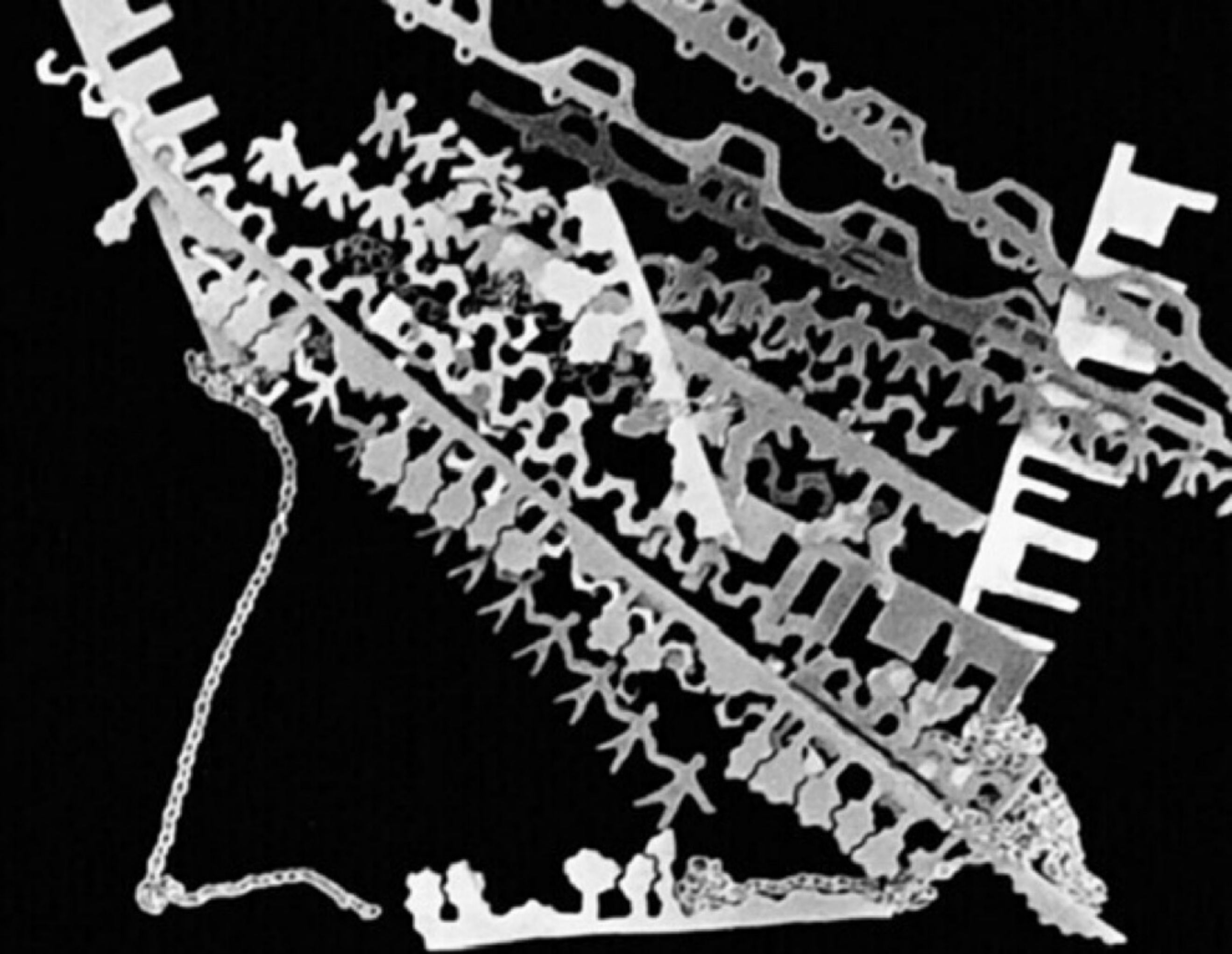
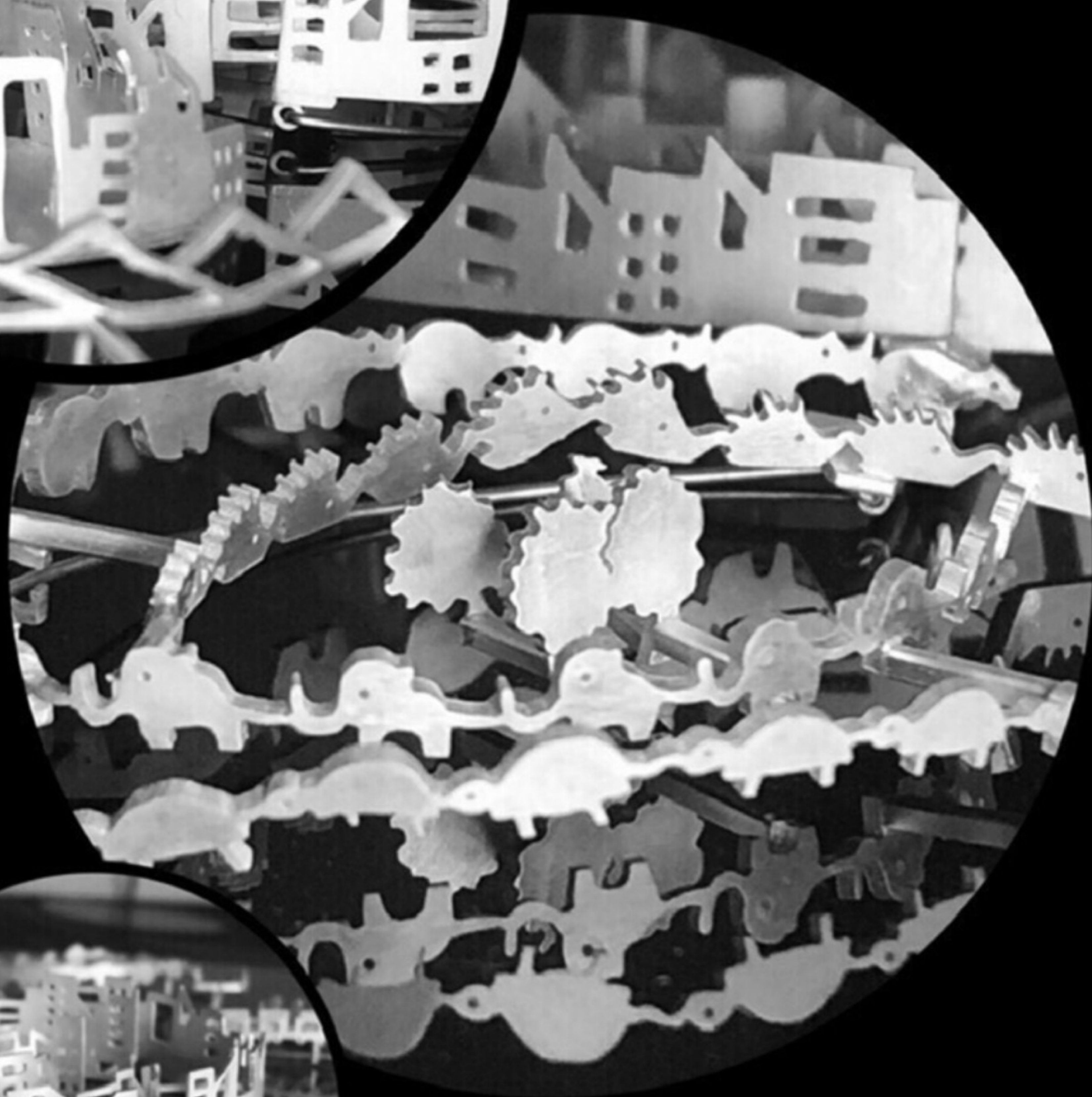
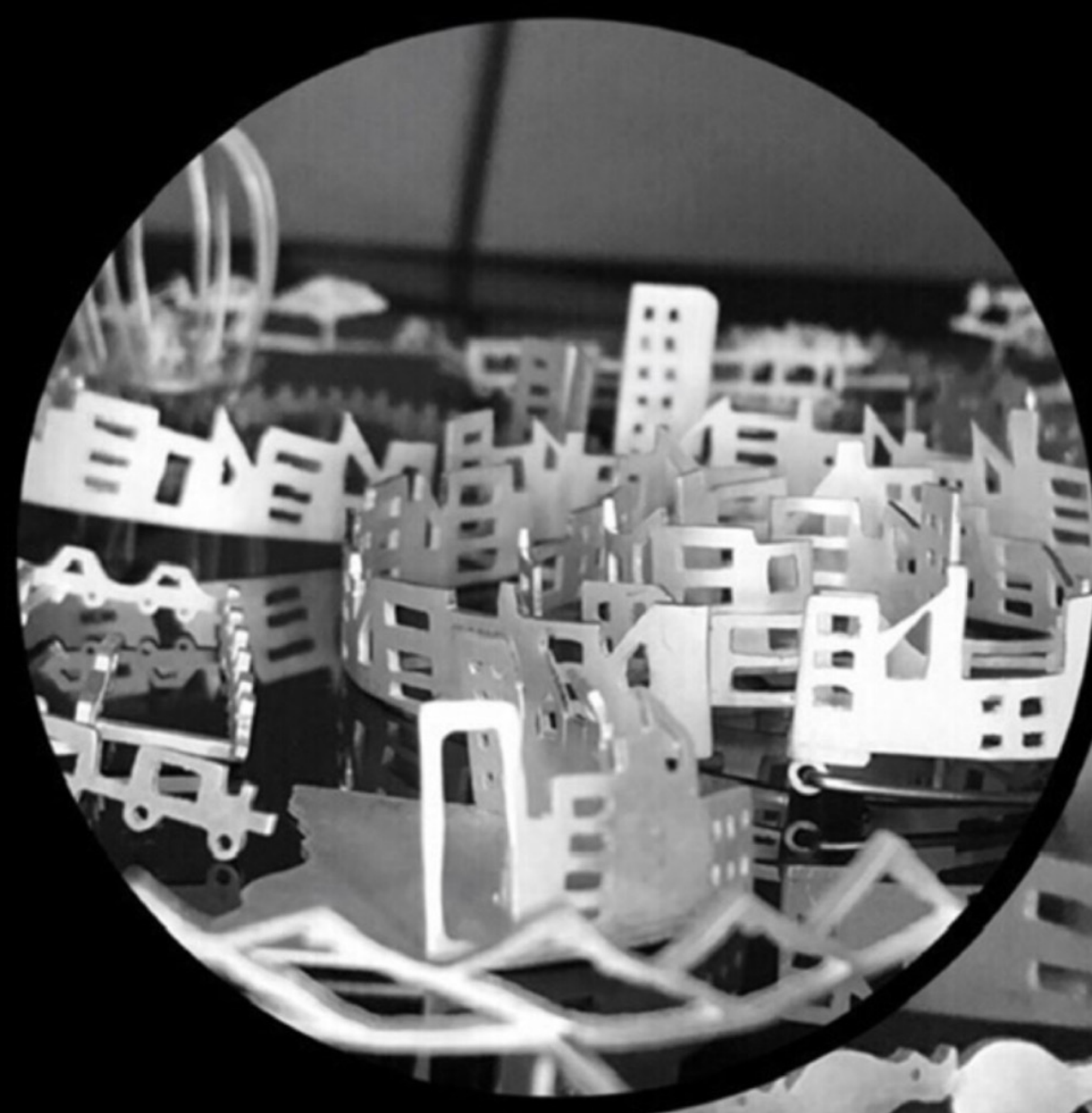


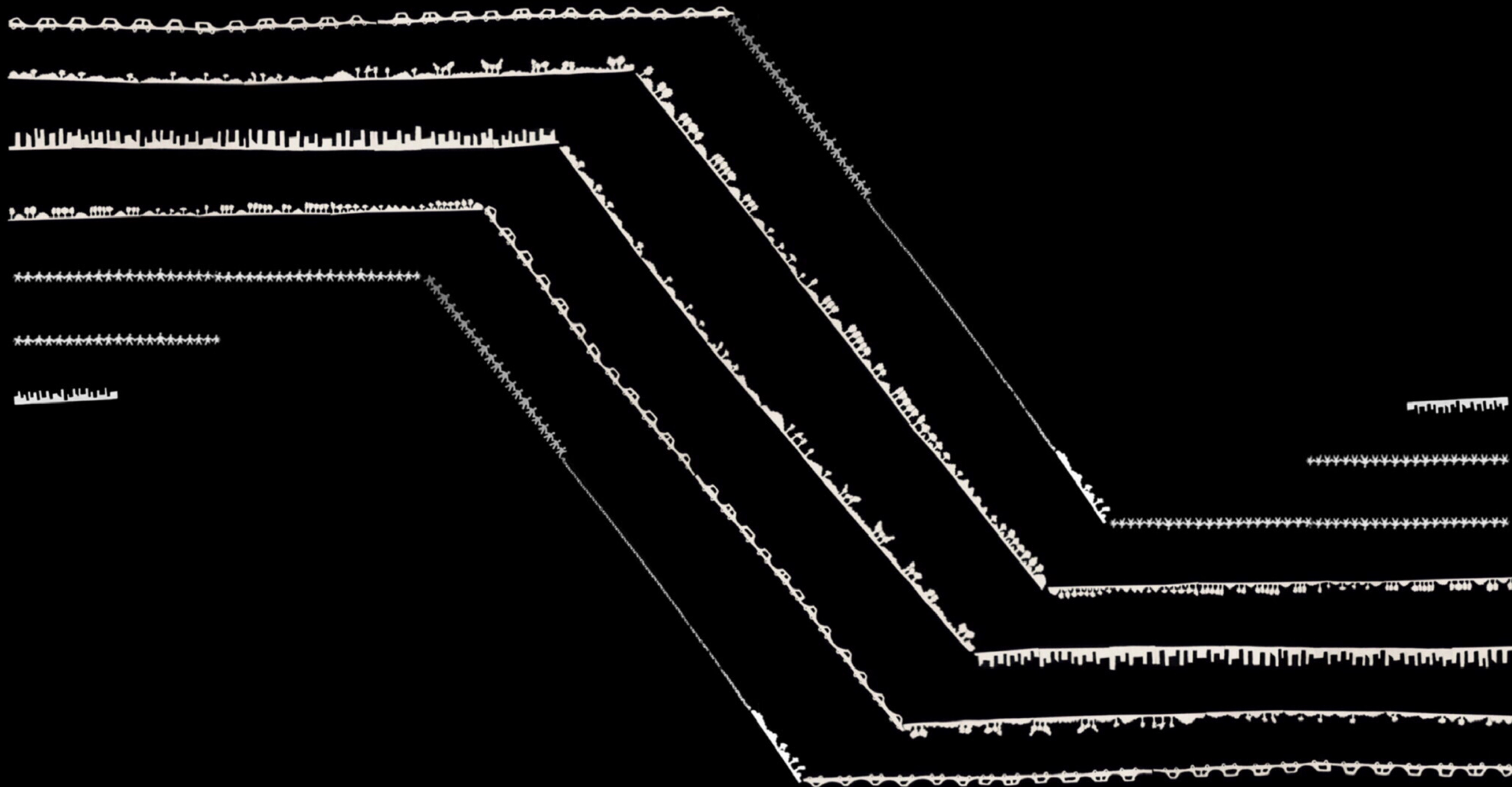


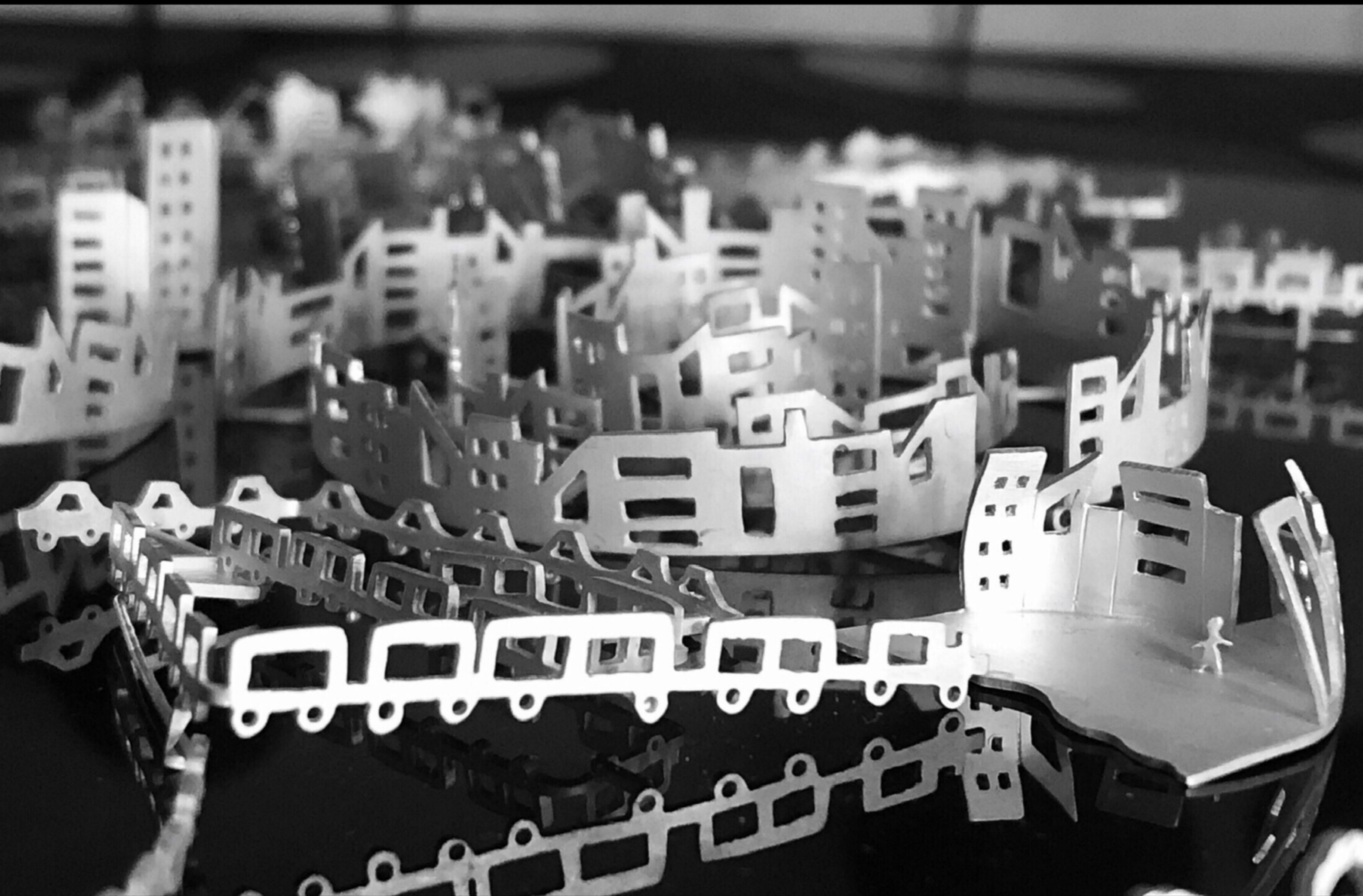




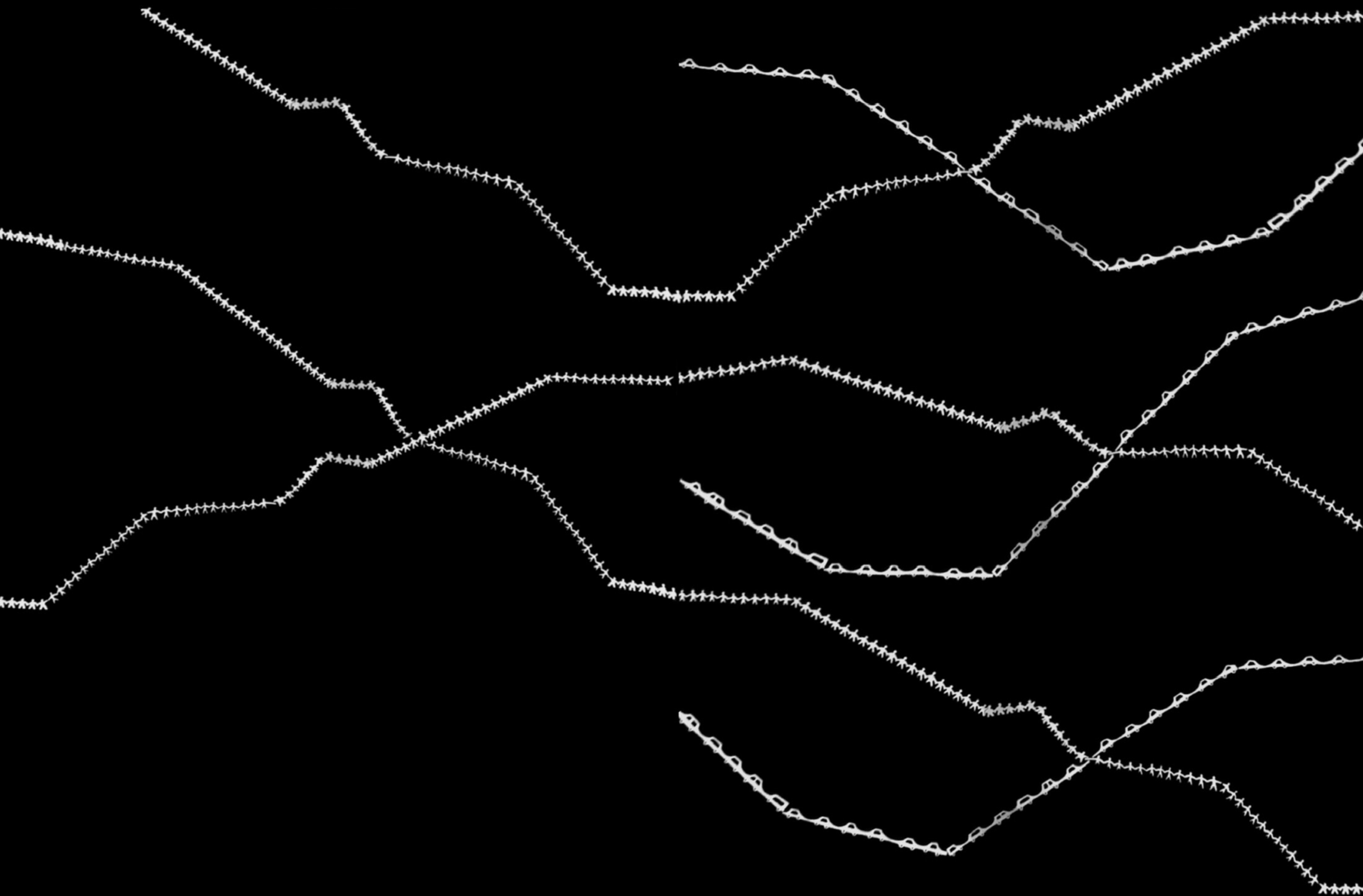


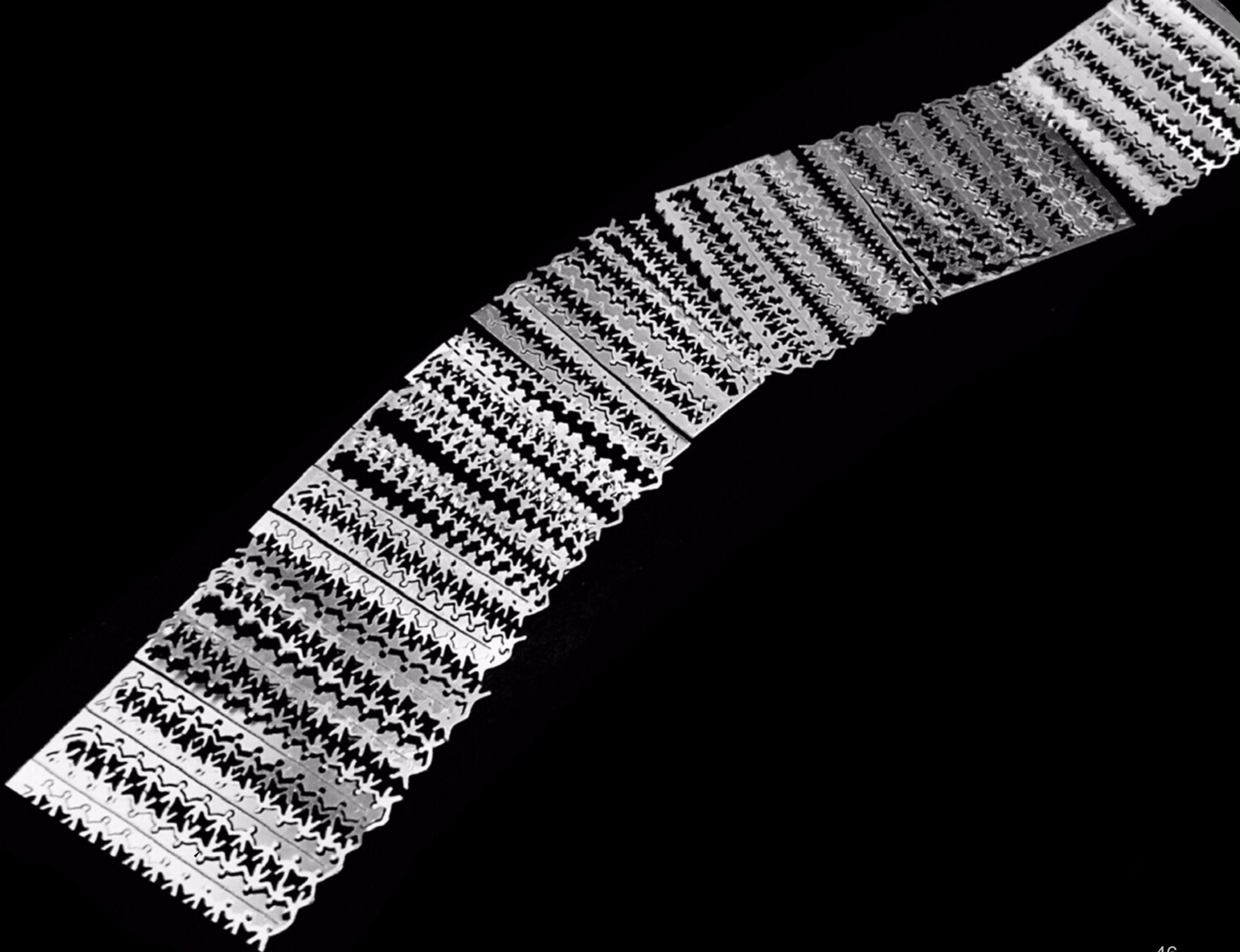














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JEWELER/METALSMITH

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EDUCATION

2018-2020 State University of New York at New Paltz
Master of Fine Art in Metal

2014-2017 California College of the Arts
Bachelor of Fine Art in Jewelry/Metal Art

2012-2013 China Central Academy of Fine Art
International Foundation Course

LANGUAGE

Chinese (Native language)
English (Fluent communication)

CERTIFICATE

Gemological Institute of America

Diamond Essentials
Colored Stone Essentials
Accredited Jewelry Professional
Diamond and Diamond Grading
Colored stone

**Fandocs International Jewelry Design
Education Center**
Filigree Technology Training

VO/ART UNION (Art education school)
Jewelry Sketch
Rhino

SKILLS

Enameling(metalsmith)
Filligree(metalsmith)
Rhino
Adobe Photoshop
Adobe Illustrator
Adobe InDesign
Jewelry Sketch
Silkscreen(Printmaking)

EXHIBITION

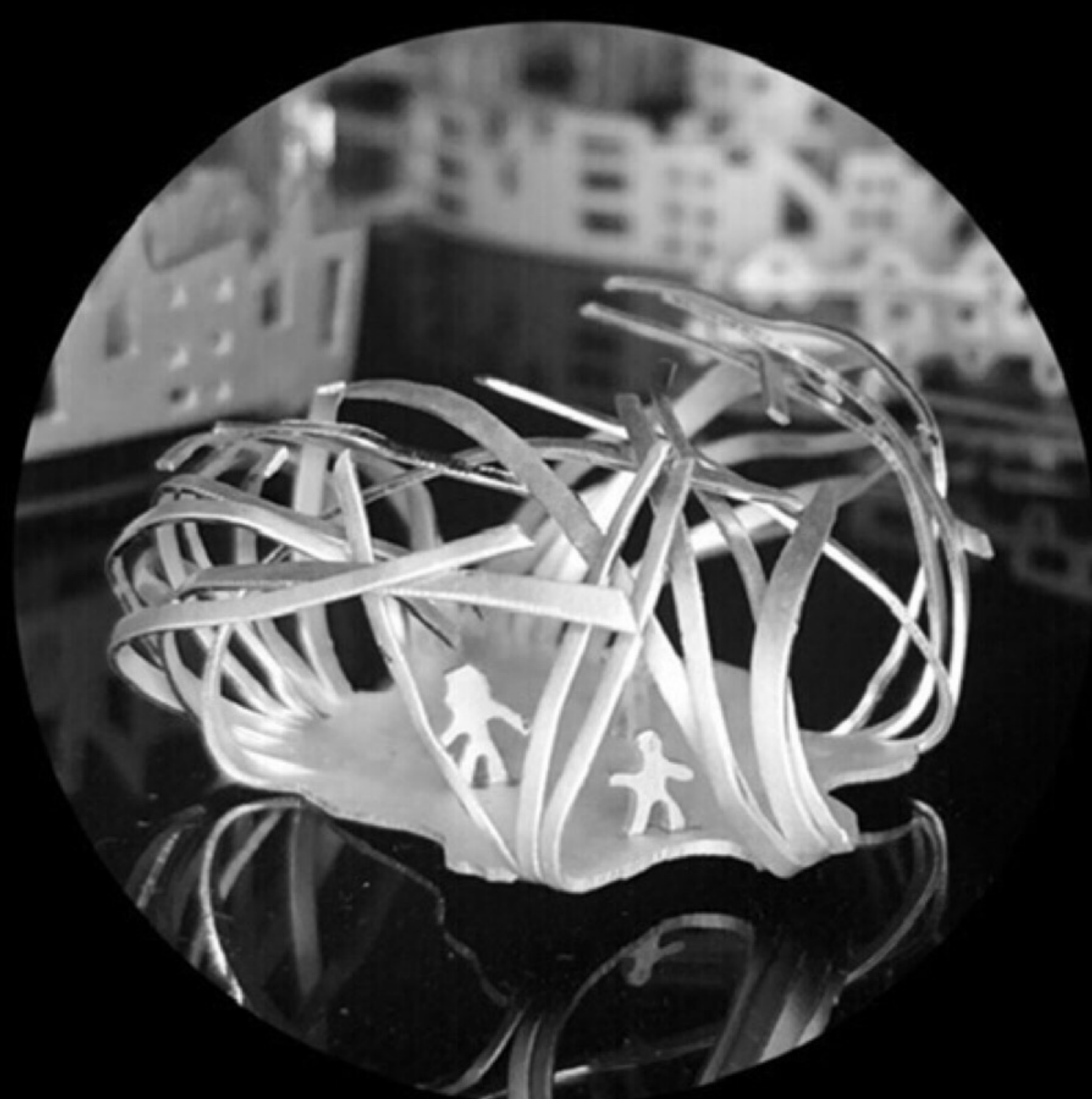
2020 May. 2020 SNAG Student Juried Exhibition

2019 Nov. New York City Jewelry Week Anonymous Brooklyn
Brooklyn Metal Works, 640 Dean St, Brooklyn, NY 11238

2019 Nov. Denizen
New York City Jewelry Week SUNY New Paltz Group Exhibition
607A Vanderbilt Ave. Prospect Heights, Brooklyn, NY 11238

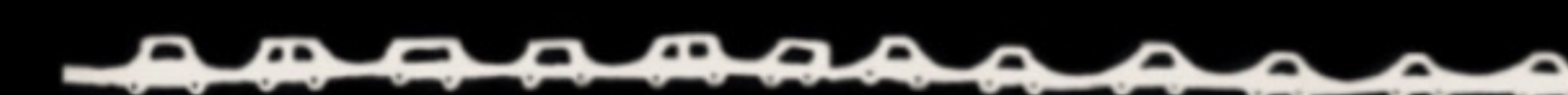
2019 Apr. Now Press: Play Joror of the Selection: Glenn Adamson
Group Exhibition at Williamsburg Art & Historical (Center)
135 Broadway, Williamsburg Brooklyn, NY 11211, USA

2019 Apr. Sublime Concepts
Group Exhibition at Bethany Arts Community
40 Somerstown Rd, Ossining, NY 10562



- 2018 Nov. **Denizen - Chelsea Hotel**
New York City Jewelry Week SUNY New Paltz Group Exhibition
Hotel Chelsea 234 W 23rd St, New York
- 2018 Feb. **Online Student Exhibition Enamelist Society 2018 Student Juried Exhibition**
- 2017 Dec. **IN THIS ERA OF ANXIETY** Those things we do not notice
Jewelry/Metal Arts BFA solo Senior Exhibition California College of the Arts
College Avenue Gallery 5241 College Avenue, Oakland, CA 94618
- 2016 Nov. **360 Ring Show**
Jewelry/Metal Arts division group show California College of the Arts
College Avenue Gallery 5241 College Avenue, Oakland, CA 94618
- 2016 Feb. **Student Show at YUMA Art Symposium**
Yuma Art Center 254 S Main St, Yuma, AZ 85364
- 2014 Apr. **China Central Academy of Fine Art Graduation Exhibition**
8 Huajiadi St, wangjing, Chaoyang, Beijing, China

EXPERIENCE



2018 Aug. --- 2019 May. Graduate Recruitment and Promotions Assistant Working for Graduate Director Matthew Friday at State University of New York at New Paltz

Editing the exhibition brochure of Group Exhibition at Williamsburg Art & Historical (Center) Now *press play* and helped to install and deinstall the exhibition. Helped with searching art school and send out the brochure. Set up and working on MFA Instagram.

2018 Aug. ---Dec. Basic Metal Intern to Lynn Batchelder at State University of New York at New Paltz

Introduced one class project and had a technique demo for students. Help and assistant Lynn in-class demo and critique.

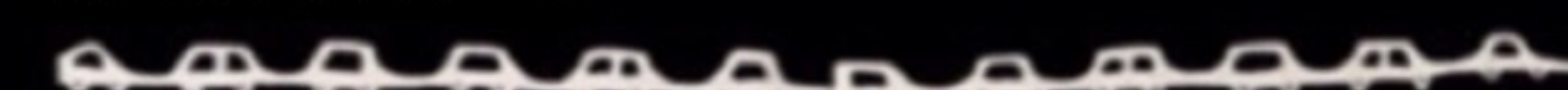
2017 Oct.-Dec. Artist Assistance Intern with Curtis H. Arima Metalsmithing

Rearranged the studio space. Helped with some coming exhibition projects.

2019 June Workshop in Haystack Mountain School of Crafts with Barbara Seidenath

2019 July Volunteer for China Kunming International Stone EXPO
Translator for Germany Jeweler Help with installation and arrangement

AWARDS



2018--2020
MFA Student Scholarship State University of New York at New Paltz

2019
David'o5 and Sara'10 Walton Thesis Scholarship

2018
California College of the Arts Distinction Graduation

Work Cited

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Besten, Den E. L. On Jewellery: a Compendium of International Contemporary Art Jewellery. ARNOLDSCHÉ Art Publishers, 2013.

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www.bdbanalytics.ir/media/1211/everybody-lies-2017.pdf.

Jones, Rachel Elizabeth. "Art Review: 'Small Worlds: Miniatures in Contemporary Art,' Fleming Museum." Seven Days, Seven Days, 6 Jan. 2020.

Lohr, Steve. "The Age of Big Data." The New York Times, The New York Times, 11 Feb. 2012.

Mayer-Schönberger Viktor, and Kenneth Cukier. Big Data: a Revolution That Will Transform How We Live, Work and Think. John Murray, 2017.

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Image Reference



Peeking The World (page1-2,7-8,11,19-20)
Sterling Silver, Copper, Acrylic
17"x17"x4.5"
2020

Peeking The World detail
(page3-4,10,13-14,21,23-24,29,32,33,37-38,51)
Sterling Silver
2020

Data Info 1 (page 5)
Sterling Silver, Digital edit
2020

Encircling (page 16,18,41-42)
Sterling Silver
10"x10"x16"
2020

Data Text 1(page 22)
Sterling Silver,Digital edit
2020

Data Text 2(page 25-26)
Sterling Silver,Digital edit
2020

Controlling (page 27-28)
Sterling Silver,Digital edit
2020

Data Text 3(page30)
Sterling Silver,Digital edit
2020

Data Text 4(page31)
Sterling Silver,Digital edit
2020



Data pile 1(page 34)
Sterling Silver, Digital edit
2020

Data Text 5(page 35-36)
Sterling Silver,Digital edit
2020

Data Text 6(page 39-40)
Sterling Silver,Digital edit
2020

Data Text 7(page 43-44)
Sterling Silver,Digital edit
2020

Printer (page 45-46)
Sterling Silver, Acrylic mirror sheet
2020

Data Text 8 (page 47-48)
Sterling Silver,Digital edit
2020

Data pile 2 (page 49)
Sterling Silver
2020

Data Info 2 (page 53)
Sterling Silver
2020

Data Info 3 (page 55)
Sterling Silver
2020



