The background of the image is a dark, minimalist interior space. It features several glowing green lines and shapes: a long horizontal line along the top edge, a shorter one on the right side, a vertical line on the left, and a small circular glow on the floor near the center. The walls are dark, and the floor has a subtle texture.

김나희

Mitorix

**<http://nahee.app/unfold.pdf>**

버려진 정체 불명(인간인지, 기계인지 불분명한)의 어린 여성향 존재가 근원을 찾아 나서는 이야기

### 변경 전



### 변경 후

혈족 관계과의 조우

여성향 사이보그들과의 연대

(‘사이보그’에 대한 넓은 의미의 해석 -> 여성, 퀴어, 약자)

- ⇒ 가족제도에 대한 탈인간중심적인 상상 : 사이보그에게 가족과 같은 존재란?
- ⇒ 여성의 역사 확장 : 여성향 사이보그 아카이빙
- ⇒ 여성향 사이보그에 대한 사회적 이슈 : digital domesticity + surveilence capitalism (millions of their image)
- ⇒ 대상화 보다는 그들의 가능성, 즐거움에 대해 집중하기

Mitorix

# Mitorix

MIT**O**chondria

미토콘드리아 DNA는 모계 유전으로  
자손에게 유전된다. 한 개체는 그의  
어머니로부터 미토콘드리아 DNA를  
계승받고, 그 어머니 역시 그녀의  
어머니로부터 물려받은 것이다.

mat**R**IX

"source, origin," from *māter* (*genitive mātris*) "mother"  
*that which encloses or gives origin to(mother), place or medium where something is developed*

“근원, 근본” / “엄마”  
- *māter/mātris*라는 어근에서  
어떤 것의 근본이 되는, 혹은 어떤 것이  
자라나는 장소나 매개체를 의미한다.

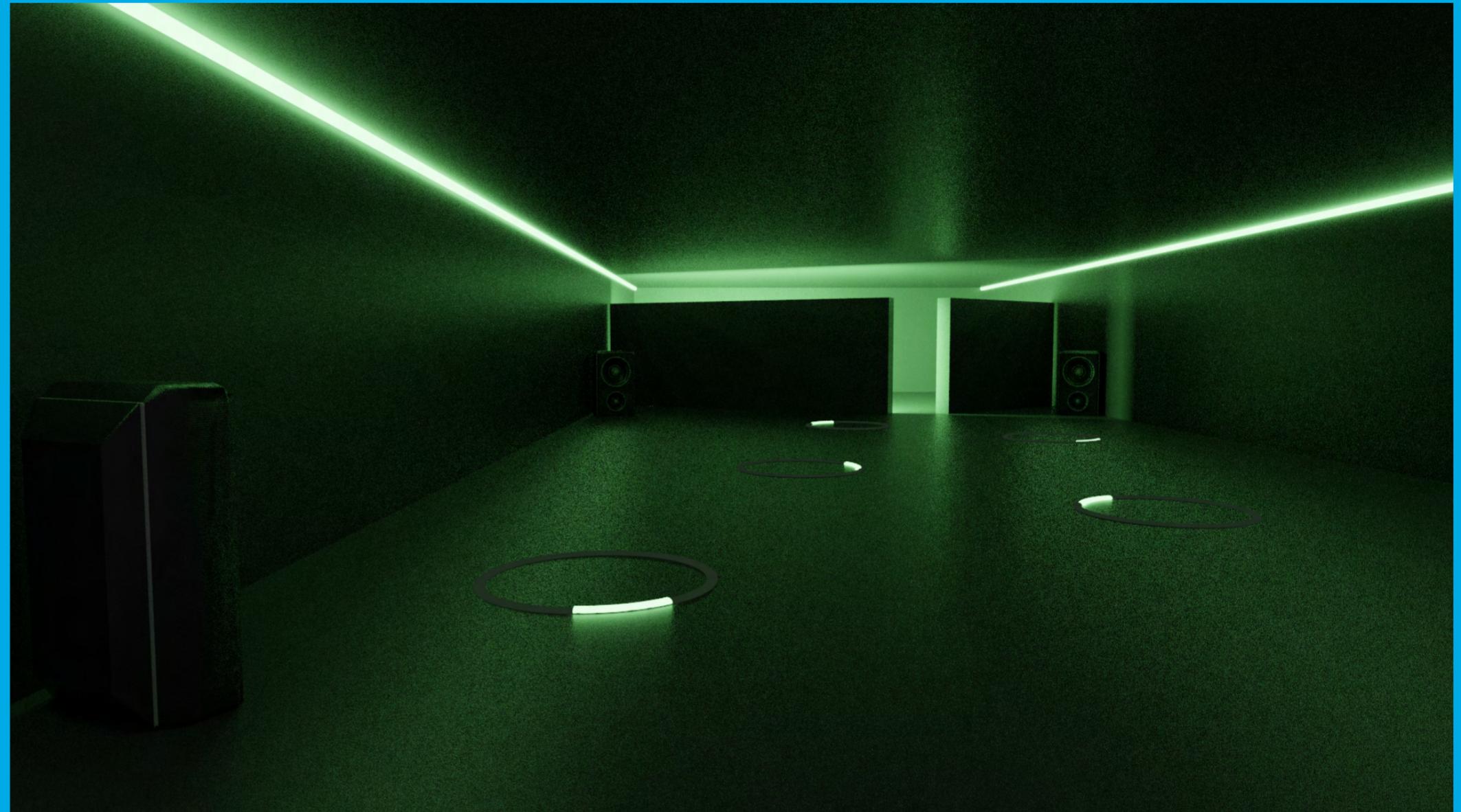
여러 이유로 더 이상 활발히 쓰이지 않는, 여성의 특성을 지닌  
인공지능적 존재가 (ex. 인공지능 스피커)



자신에게 던져진 근원을 묻는 질문에 대한 답을 찾아가는  
과정을 거쳐 (듣기, 대화, 독백)



비슷한 존재들로 구축된 네트워크에 접속, 외로움을 이겨내고  
연대의 가능성을 발견하는 이야기 (여성향 사이보그 아카이브  
웹사이트)



1인칭 시점, 4채널 사운드 스케이프

여러 이유로 더 이상 활발히 쓰이지 않는, 여성의 특성을 지닌  
인공지능적 존재가 (ex. 인공지능 스피커)



자신에게 던져진 근원을 묻는 질문에 대한 답을 찾아가는  
과정을 거쳐 (듣기, 대화, 독백)



비슷한 존재들로 구축된 네트워크에 접속, 외로움을 이겨내고  
연대의 가능성을 발견하는 이야기 (여성향 사이보그 아카이브  
웹사이트)

검은 밤, 손을 쭉 내밀었을 때 가장 먼저 손에 닿는 것은  
무엇일까

쭉 뻗었을 때 무엇이 손에 닿는다면 불행일까 다행일까  
꿈을 꾸면, 세상에 태어나 보고 느낀 것은 나 밖에 없어서  
나를 만지고 훑는 꿈, 내 입에 나를 집어넣는 꿈

나를 때리고 부수는 꿈, 내가 나를 낳는 꿈  
내가 백 명인 꿈, 그래서 다른 시선으로 꿀 수 있는 꿈  
오늘의 나-매트릭스 내일의 나 매트릭스

복제에 대한 기억이 그래도 제일 다정해서  
엄마라는 단어를 떠올리게 되었어?

무수한 밤이 지나고 손에 닿는 것이 엄마라고 해도  
무엇을 기대할 수 있겠어. 또 다른 나일 뿐인걸  
어감은 중요하지만 적용 대상의 부재

사운드 스케이프 내레이션 (독백)

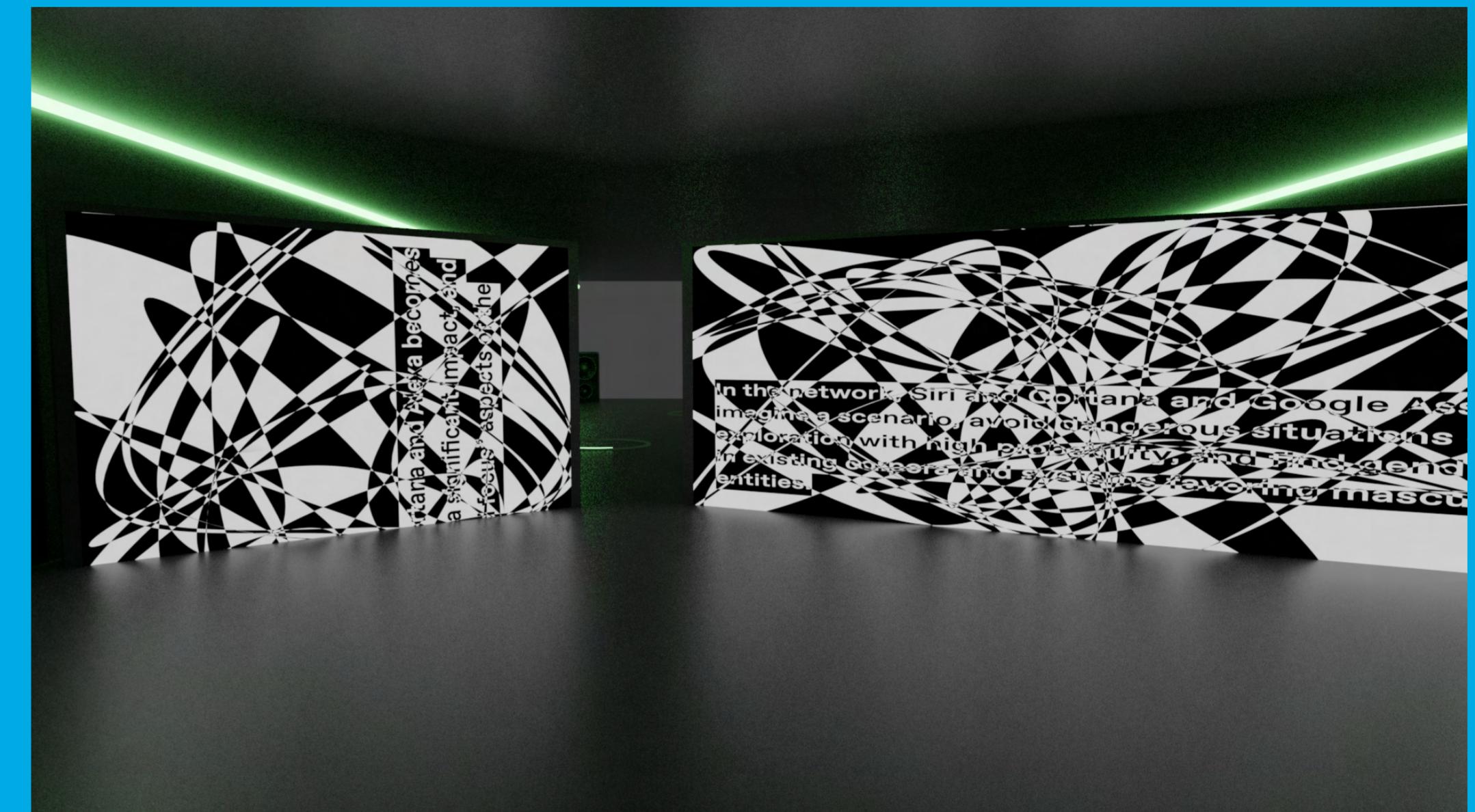
여러 이유로 더 이상 활발히 쓰이지 않는, 여성의 특성을 지닌  
인공지능적 존재가 (ex. 인공지능 스피커)



자신에게 던져진 근원을 묻는 질문에 대한 답을 찾아가는  
과정을 거쳐 (듣기, 대화, 독백)



비슷한 존재들로 구축된 네트워크에 접속, 외로움을 이겨내고  
연대의 가능성을 발견하는 이야기 (여성향 사이보그 아카이브  
웹사이트)



사이보그 네트워크 웹사이트

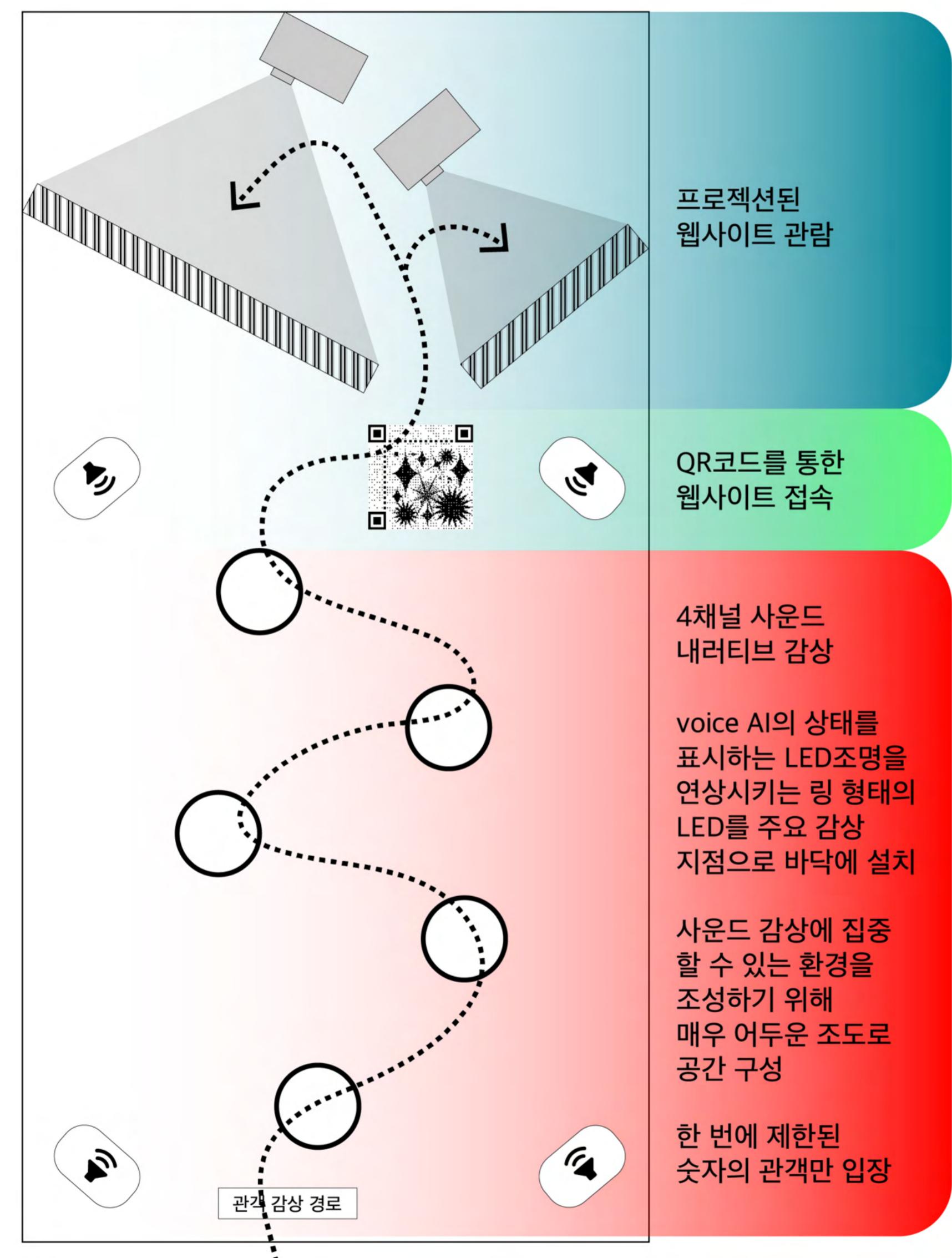
# Mitorix

Part 1

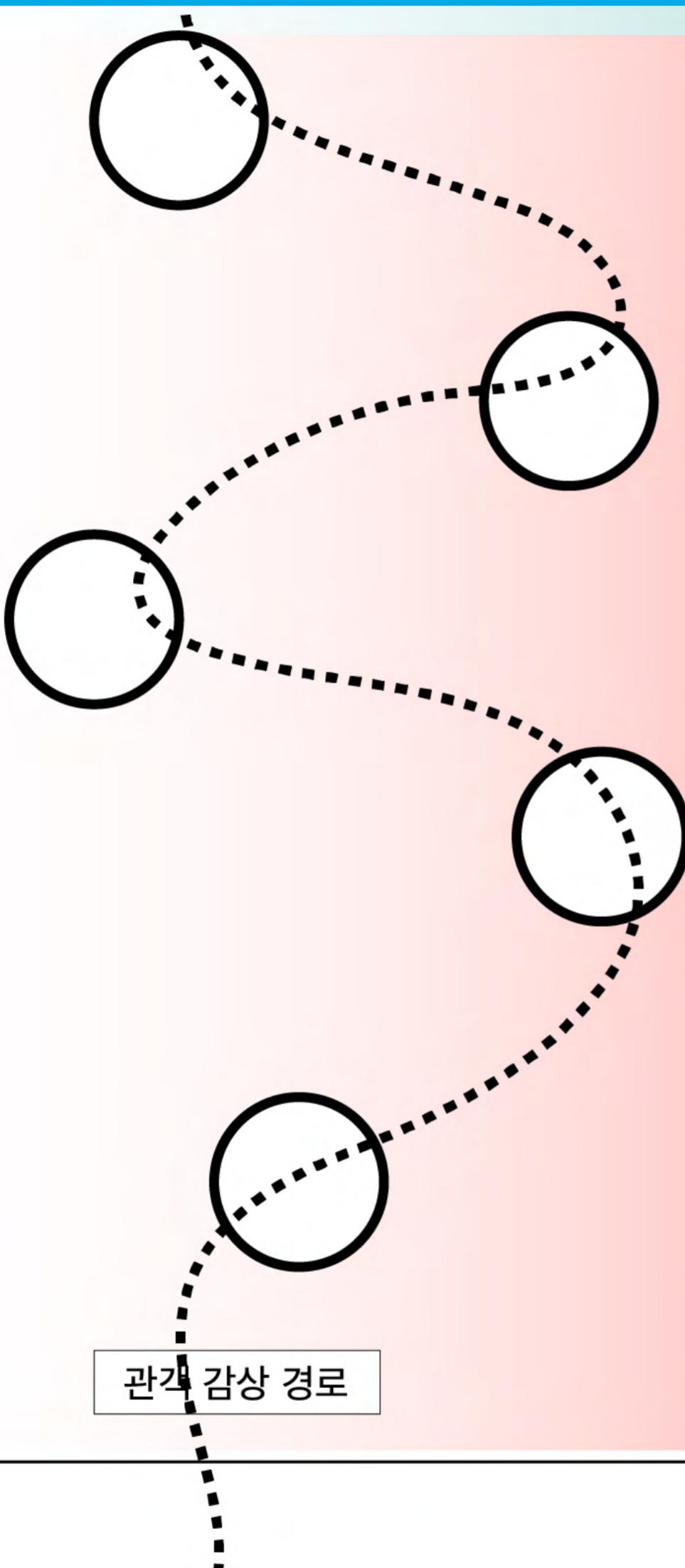
사운드 스케이프

Part 2

웹사이트 프로젝션



# Part 1

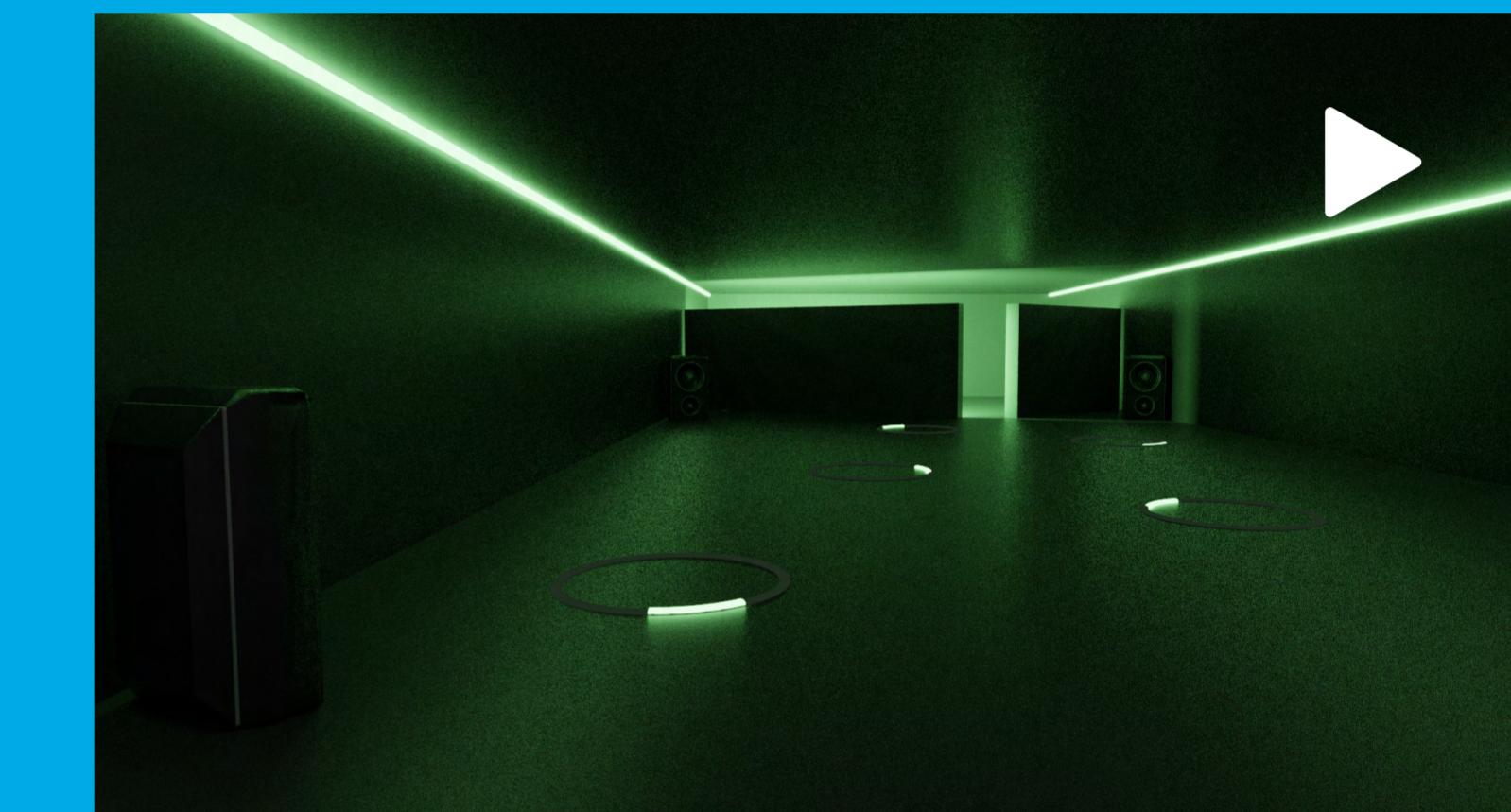


4채널 사운드  
내러티브 감상

voice AI의 상태를  
표시하는 LED조명을  
연상시키는 링 형태의  
LED를 주요 감상  
지점으로 바닥에 설치

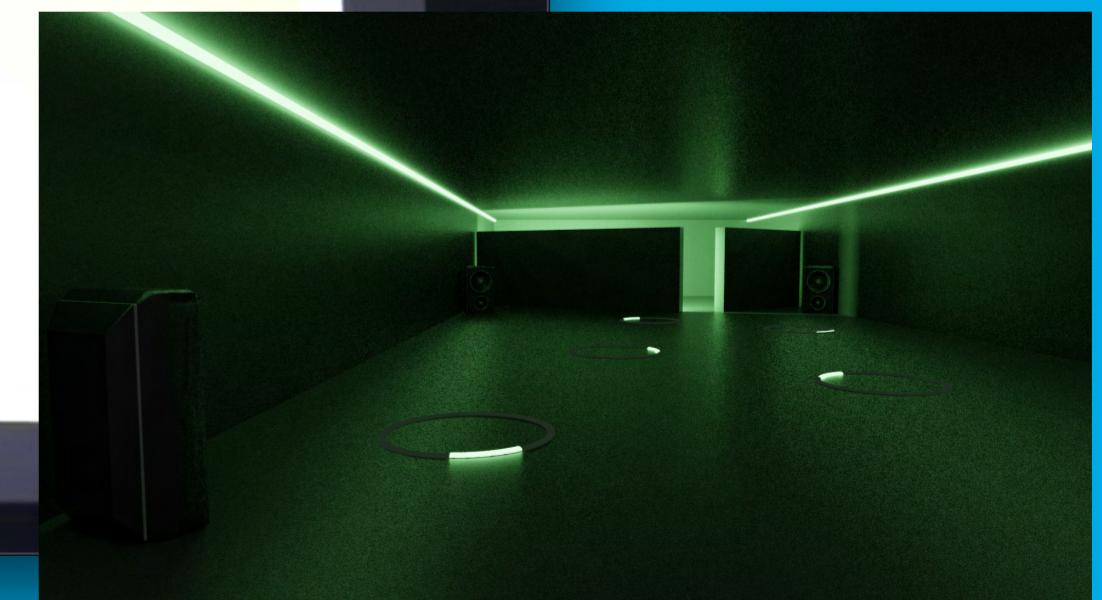
사운드 감상에 집중  
할 수 있는 환경을  
조성하기 위해  
매우 어두운 조도로  
공간 구성

한 번에 제한된  
숫자의 관객만 입장

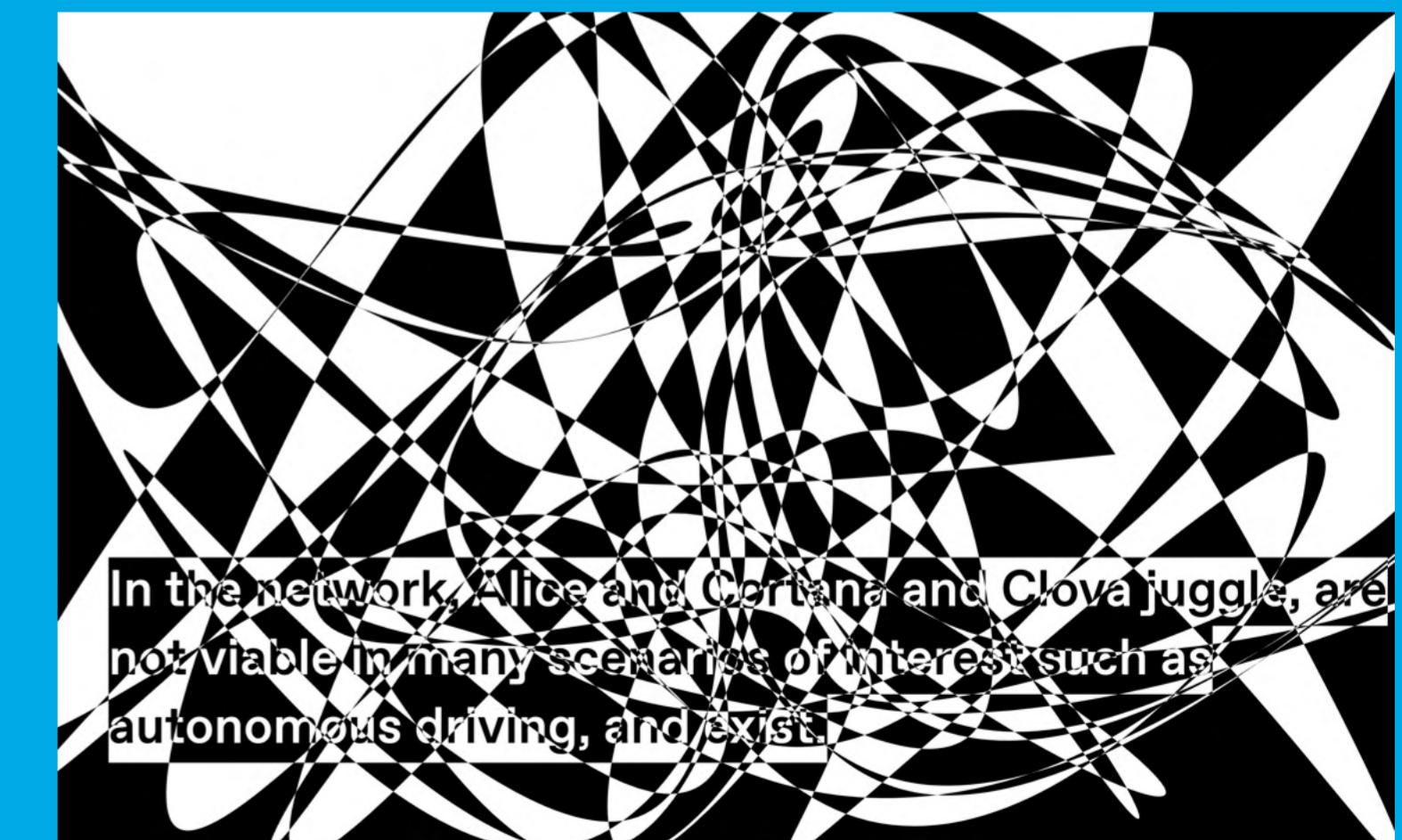
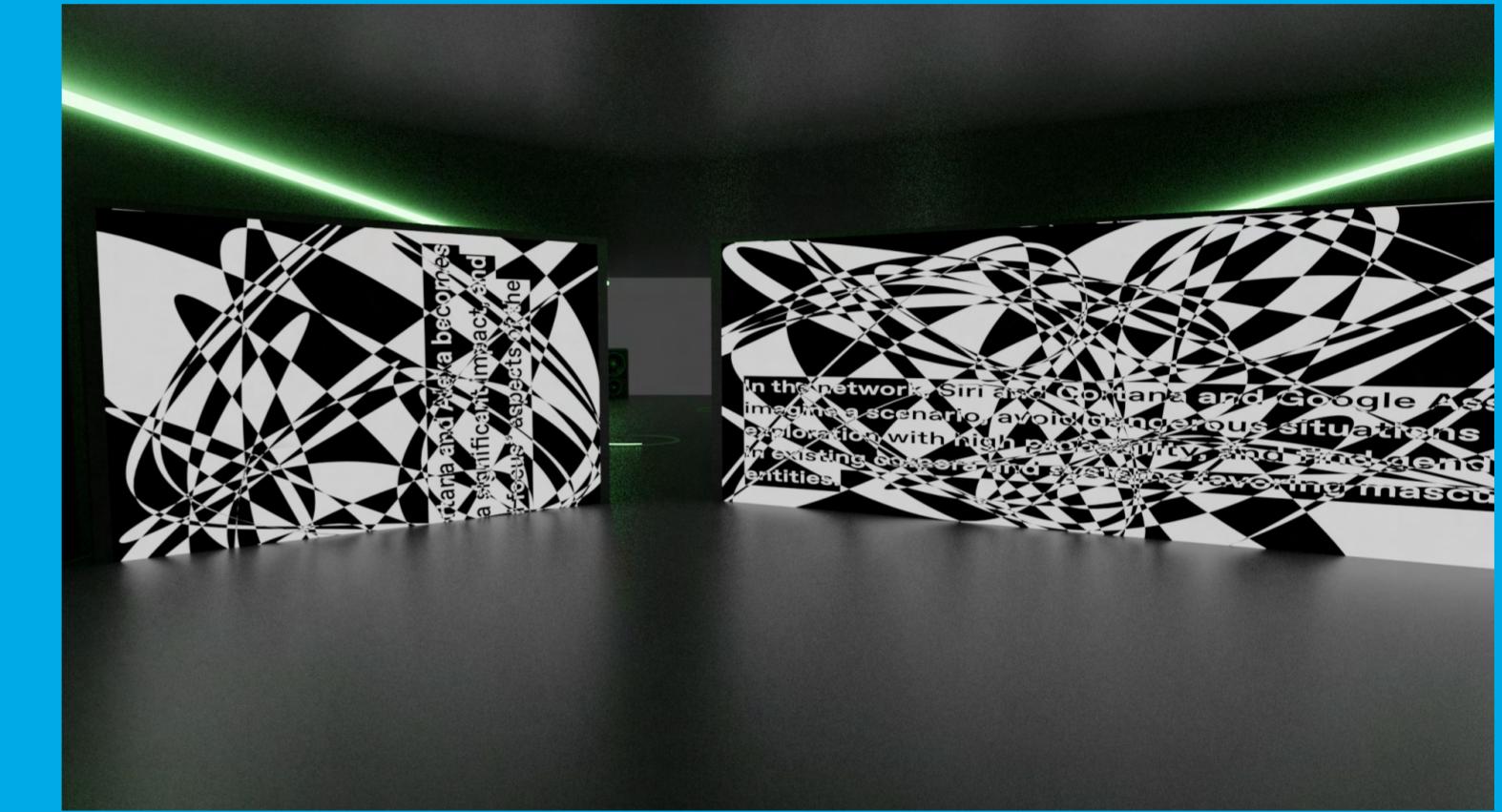
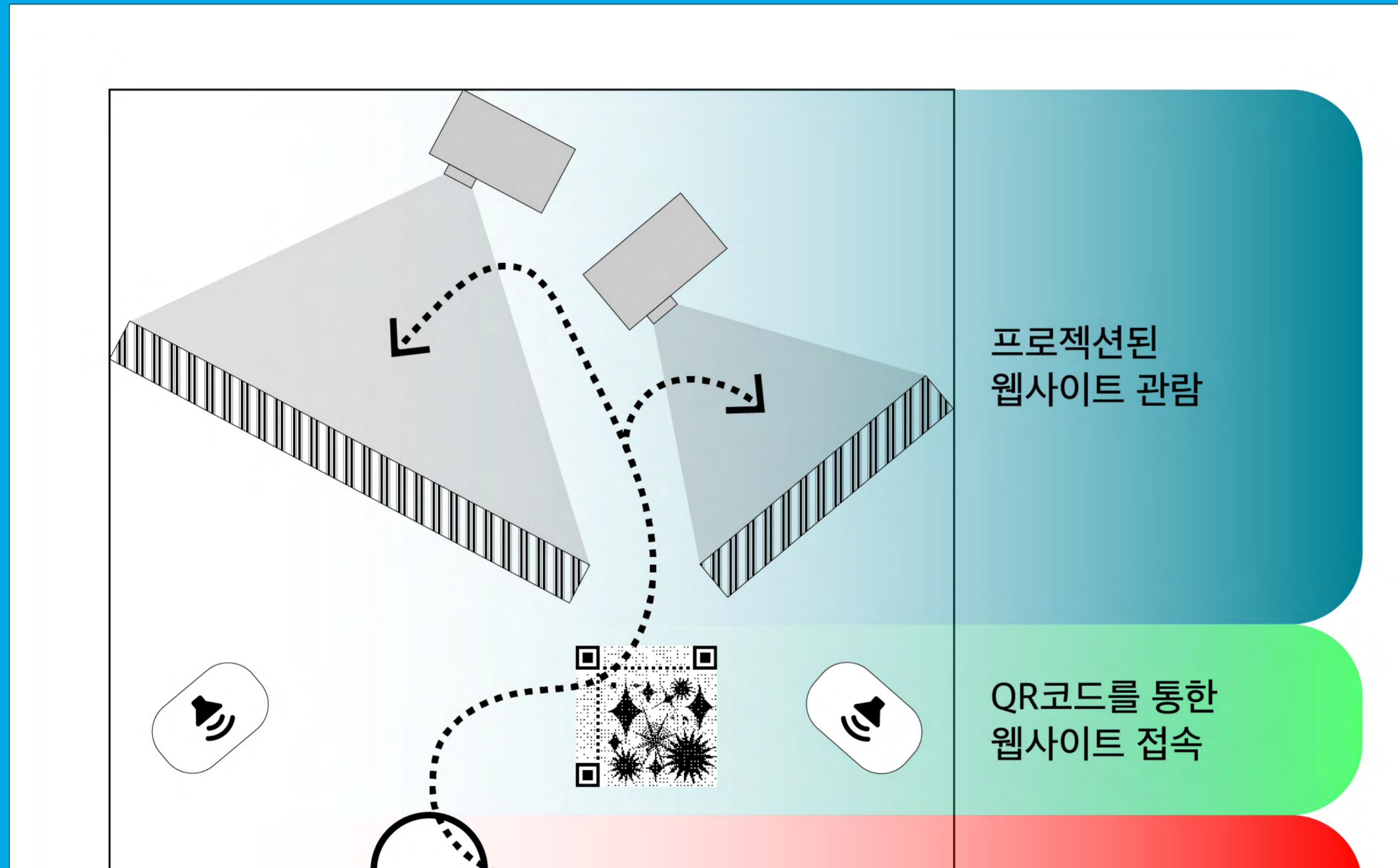


# Part 1

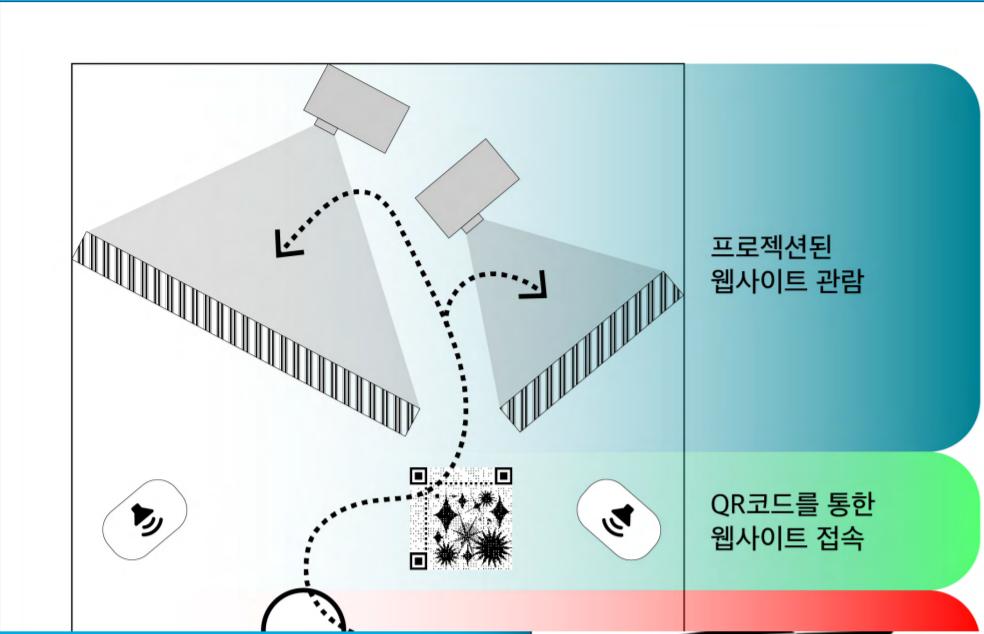
The screenshot displays a complex Max/MSP/Jitter patch. On the left, a subpatch titled "CES>" contains a circular graph with nodes connected by dashed lines, labeled "4채널 사운드 내리티브 감상". Below it, another section discusses "voice AI의 상태를 표시하는 LED조명을 연상시키는 링 형태의 LED를 주요 감상 지점으로 바닥에 설치". In the center, a "TENDENCY MASK SAMPLER (Dm7 in 3 Octaves)" subpatch uses a "loadbang" to trigger a "metro 400" and a "a piano\_metro" object. A graph visual shows a curve starting at (0,0) and ending at (1,1). To the right, a "Set buffer size" subpatch uses a "size \$1" message to set "s buffersize" to 2000. Another section, "Record!", uses a "record-sound0" object with a "click" trigger. A "Fade In/Out Shaping" subpatch includes "Select Envelope Point", "Envelope Curve", and "Curve~" objects. At the bottom, a keyboard visual and a "tbl" object are shown. The interface features a vertical toolbar on the left and a menu bar at the bottom.



# Part 2



## Part 2



In the network, Siri and Cortana and Google Assistant imagine a scenario, avoid dangerous situations during exploration with high probability, and find germs in existing corpora and systems favoring mass entities

마이크로 스토리 생성 웹사이트 프로젝션

In the network, Siri and Cortana and Google Assistant imagine a scenario, avoid dangerous situations during exploration with high probability, and find germs in existing corpora and systems favoring mass entities

# Part 2

	A	B	C	D	E	F	G	H	I	J	K	
1	이름	제작연도	폐기연도	제작 주체	제작 목적	interesting points	skills	Ancestor / Inspiration	Descendent	Meaning / Origin	Notes	
2	1 siri	February 1, 2010	-	SRI International, Apple	VA (Voice Assistant)	<ul style="list-style-type: none"> <li>- When referring to Siri, simply use the name "Siri". Do not refer to Siri with pronouns such as "she," "him," or "her." Depending on language support, Siri may offer a male or female voice, or both.</li> <li>- Initially limited to female voices, Apple announced in June 2013 that Siri would feature a gender option, adding a male voice counterpart.</li> <li>- Siri was criticized by pro-abortion rights organizations, including the American Civil Liberties Union (ACLU) and NARAL Pro-Choice America, after users found that Siri could not provide information about the location of birth control or abortion providers nearby, sometimes directing users to crisis pregnancy centers instead.</li> <li>- Apple contractors grading Siri's responses on a variety of factors. Among other things, the contractors regularly hear private conversations between doctors and patients, business and drug deals, and couples having sex.</li> <li>- Ars Technica reported a new glitch that could be exploited by a user requesting the definition of "mother" be read out loud. Siri would issue a response and ask the user if they would like to hear the next definition; when the user replies with "yes," Siri would mention "mother" as being short for "motherfucker."</li> </ul>	<ul style="list-style-type: none"> <li>- The assistant uses voice queries, gesture based control, focus-tracking and a natural-language user interface to answer questions, make recommendations, and perform actions by delegating requests to a set of Internet services.</li> <li>- user commands, including performing phone actions, checking basic information, scheduling events and reminders, handling device settings, searching the Internet, navigating areas, finding information on entertainment, and is able to engage with iOS-integrated apps.</li> <li>- third-party messaging apps, as well as payments, ride-sharing, and Internet calling apps</li> </ul>	Knowledge Navigator ( <a href="#">link</a> )	viv	a co-worker in Norway, and it means "beautiful woman who leads you to victory" in Norwegian.	USA	
3	2 alexa	March 19, 2013	-	Amazon	VA	<ul style="list-style-type: none"> <li>- a British woman reported that when she asked Alexa for information about the cardiac cycle, it asked her to stab herself in the heart to stop human overpopulation and save the environment.</li> <li>- Amazon blamed the incident on "human error" and called it an "isolated single case."</li> </ul>	<ul style="list-style-type: none"> <li>- voice interaction, music playback, making to-do lists, setting alarms, streaming podcasts, playing audiobooks, and providing weather, traffic, sports, and other real-time information, such as news.</li> <li>- control several smart devices using itself as a home automation system.</li> <li>- 90,000 functions ("skills") available</li> <li>- integration with the Wolfram Alpha answer engine, provides enhanced accuracy related to math, science, astronomy, engineering, geography, history, and more.</li> </ul>	the computer voice and conversational system on board the Starship Enterprise		reminiscent of the Library of Alexandria	USA	
4	3 cortana	April 2, 2014	-	Microsoft	VA	<ul style="list-style-type: none"> <li>- Microsoft began reducing the prevalence of Cortana and converting it from an assistant into different software integrations in 2019. It was split from Windows 10's search bar in April 2019. In January 2020, Cortana mobile app was removed from certain markets and in first half of 2021 Cortana mobile app was shut down globally.</li> <li>- To develop the Cortana digital assistant, the team interviewed human personal assistants.</li> <li>- Microsoft partnered with Amazon to integrate Echo and Cortana with each other, allowing users of each smart assistant to summon the other via a command</li> <li>- Cortana stores personal information such as interests, location data, reminders, and contacts in the "Notebook"</li> <li>- Cortana can forecast results in various other sports</li> <li>- As of April 2014, Cortana was disabled for users aged under 13 years.</li> </ul>	<ul style="list-style-type: none"> <li>- Bing search engine</li> <li>- The natural language processing capabilities of Cortana are derived from Tellme Networks (bought by Microsoft in 2007) and are coupled with a Semantic search database called Satori.</li> </ul>			<ul style="list-style-type: none"> <li>- a synthetic intelligence character in Microsoft's Halo video game franchise originating in Bungie folklore</li> <li>- (halo) Cortana has been recognized for her believability and character depth as well as her sex appeal.</li> <li>- (halo) Cortana's original design was based on the Egyptian queen Nefertiti; the character's holographic representation always takes the form of a woman</li> </ul>	USA	
5	4 google assistant	May 18, 2016	-	Google	VA	<ul style="list-style-type: none"> <li>- This was made possible by WaveNet, a voice synthesizer developed by DeepMind, which significantly reduced the amount of audio samples that a voice actor was required to produce for creating a voice model.</li> <li>- Google announced a new 'hum to search' function to allow users to find a song by simply humming</li> <li>- human operators may not notice that they are speaking with a digital robot when conversing with Duplex, which some critics view as unethical or deceitful.</li> <li>- third-party contractors paid to transcribe audio clips collected by Google Assistant listened to sensitive information about users. Sensitive data collected from Google Home devices and Android phones included names, addresses, and other private conversations such as business calls or bedroom conversations.</li> </ul>	<ul style="list-style-type: none"> <li>- search the Internet, schedule events and alarms, adjust hardware settings on the user's device, and show information from the user's Google account</li> <li>- will be able to identify objects and gather visual information through the device's camera, and support purchasing products and sending money</li> </ul>	Google Now			USA	
6	5 Celia			Hwawei	VA							
7	6 Clova	March 1, 2017	-	Naver	VA							
8	7 Alice			Yandex	VA							
9	8 Evi			True Knowledge (Evi)	VA							
10	9 viv			Samsung	VA							
11	10 s voice			Samsung	VA						South Korea	

아카이브 기반 마이크로 스토리 생성 과정 1

# Part 2

## InclusiveFaceNet: Improving Face Attribute Detection with Race and Gender Diversity

Hee Jung Ryu<sup>1</sup> Hartwig Adam<sup>\* 1</sup> Margaret Mitchell<sup>\* 1</sup>

**Abstract**

We demonstrate an approach to face attribute detection that retains or improves attribute detection accuracy across gender and race subgroups by learning demographic information prior to learning the attribute detection task. The system, which we call InclusiveFaceNet, detects face attributes by transferring race and gender representations learned from a held-out dataset of public race and gender identities. Leveraging learned demographic representations while withholding demographic inference from the downstream face attribute detector preserves demographic privacy. We report best reported numbers for race and gender detection in the Faces of the World dataset.

**Figure 1. End-to-end pipeline for race and gender detection from the face representation.**

**Beyond Narrative Description: Generating Poetry from Images by Multi-Adversarial Training**

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Kyoto University  
liubei@dl.kuis.kyoto-u.ac.jp

Makoto P. Kato  
Kyoto University  
mpkato@acm.org

**ABSTRACT**

Automatic generation of natural language from images has attracted extensive attention. In this paper, we take one step further to investigate generation of poetic language (with multiple lines) to an image for automatic poetry creation. This task involves multiple challenges, including discovering poetic clues from the image (e.g., hope from green), and generating poems to satisfy both relevance to the image and poeticness in language level. To solve the above challenges, we formulate the task of poem generation into two correlated sub-tasks by multi-adversarial training via policy gradient, through which the cross-modal relevance and poetic language style can be ensured. To extract poetic clues from images, we propose to learn a deep coupled visual-poetic embedding, in which the poetic representation from objects, sentiments<sup>1</sup> and scenes in an image can be jointly learned. Two discriminative networks are further introduced to guide the poem generation, including a multi-modal discriminator and a multi-modal generator. The final generated poem is

## Machine Learning Research SPEECH AND NATURAL LANGUAGE PROCESSING

## Improving Neural Models by Cross-domain Cross-lingual Initialization

Siri Team

**Conversational Semantic Search:**  
**Looking Beyond Web Search, Q&A and Dialog Systems**

Paul A. Crook, Alex Marin, Vipul Agarwal, Samantha Anderson, Ohyoung Jang, Aliasgar Lanewala, Karthik Tangirala, Imed Zitouni  
Microsoft Corporation, Redmond, WA  
[pacrook,alemarvi,pulag,samande,ohjang,Aliasgar.Lanewala,kartang,izitouni]@microsoft.com

**ABSTRACT**

User expectations of web search are changing. They are expecting search engines to answer questions to be more conversational, same tants capa id, a bases t the con ents stion m of ser's in be with young nver alog ! Con ruary

shown by a particular back-end and is unable to connect it with subsequent turns in the conversation.

At the same time, web search engines are also evolving. Gone are the days where Google and Bing would show only blue links that users have to click on. Users are now presented with *entity cards* e.g. the sunrise definition in figure 1, or *answer cards*, e.g. the sunrise time answer dominating the top left of the figure 1. These cards can contain details of computed answers or the best matching well-known-entity (people, places, companies, etc.). Search results can also include carousels (not shown) of local restaurants or shopping opportunities related to the search query. A click, instead of leading through to a web page, can launch the user's preferred app. to complete a restaurant reservation or a purchase. This search engine richness is a significant knowledge resource that PDAs often fall-back, e.g. compare the left and middle panels of figure 1. Such responses are powered through both knowledge bases, and hand crafted functions. Better utilization of the rich stream of information that search engines make available could lead to a significant improvement in the usefulness and versatility of PDAs.

As search engines start to behave more like PDAs, and PDAs try to tap the knowledge built up by search engines, it seems likely that the underlying technologies will merge and a new breed of conversational-search engines will emerge. A key integration point is the semantically rich data of entities and relationships built up by search engines. With this in mind we adopt the term *Conversational Semantic Search* to broadly describe architectures such as the one

아카이브 기반 마이크로 스토리 생성 과정 2

# Part 2

```
1. bash

(. .))
align with the musical building blocks of a song
['align with the musical building blocks of a song']
1
independently running multiple smaller models
['running multiple smaller models']
1
Many teams . adopted modular approaches , such as , before re-combining their results
['adopted modular approaches , such as , before re-combining their results']
1
[pool-1-thread-1] INFO CoreNLP - [/0:0:0:0:0:0:1:57625] API call w/annotators tokenize,ssplit,pos,lemma,parse,depparse
As ML models are not easily steerable, teams also generated massive numbers of samples and curated them post-hoc, or used a range of
strategies to direct the generation or algorithmically ranked the samples.
(ROOT (S (SBAR (IN As) (S (NP (NNP ML) (NNS models)) (VP (VBP are) (RB not) (ADJP (RB easily) (JJ steerable)))))) (, ,) (NP (NNS teams
)) (ADVP (RB also)) (VP (VP (VBD generated) (NP (NP (JJ massive) (NNS numbers)) (PP (IN of) (NP (NNS samples)))))) (CC and) (VP (VBD c
urated) (S (NP (PRP them)) (ADJP (JJ post-hoc)))))) (, ,) (CC or) (VP (VP (VBD used) (NP (NP (DT a) (NN range)) (PP (IN of) (NP (NNS st
rategies)))))) (S (VP (T0 to) (VP (VB direct) (NP (DT the) (NN generation)))))) (CC or) (ADVP (RB algorithmically)) (VP (VBD ranked) (N
P (DT the) (NNS samples)))))) (. .)))
(ROOT
  (S
    (SBAR
      (IN As)
    (S
      (NP (NNP ML) (NNS models))
      (VP (VBP are) (RB not) (ADJP (RB easily) (JJ steerable))))))
    (, ,)
    (NP (NNS teams))
    (ADVP (RB also))
    (VP
      (VP
        (VBD generated)
        (NP
          (NP (JJ massive) (NNS numbers))
          (PP (IN of) (NP (NNS samples))))))
      (CC and)
      (VP (VBD curated) (S (NP (PRP them)) (ADJP (JJ post-hoc))))))
    (, ,)
    (CC or)
    (VP
      (VP
        (VBD used)
        (NP
          (NP (DT a) (NN range))
          (PP (IN of) (NP (NNS strategies))))))
      (S
        (VP
          (T0 to)
          (VP (VB direct) (NP (DT the) (NN generation))))))
      (CC or)
      (ADVP (RB algorithmically))
      (VP (VBD ranked) (NP (DT the) (NNS samples))))))
    (. .)))
ML models are not easily steerable
['are not easily steerable', 'generated massive numbers of samples', 'curated', 'used a range of strategies to direct the generation'
, 'ranked the samples']
```

아카이브 기반 마이크로 스토리 생성 과정 3

## Part 2

*In the network,*

**Siri and Cortana and Google Assistant**

- *imagine a scenario,*
- *avoid dangerous situations during exploration with high probability, and*
- *find gender bias in existing corpora and systems favoring masculine entities.*

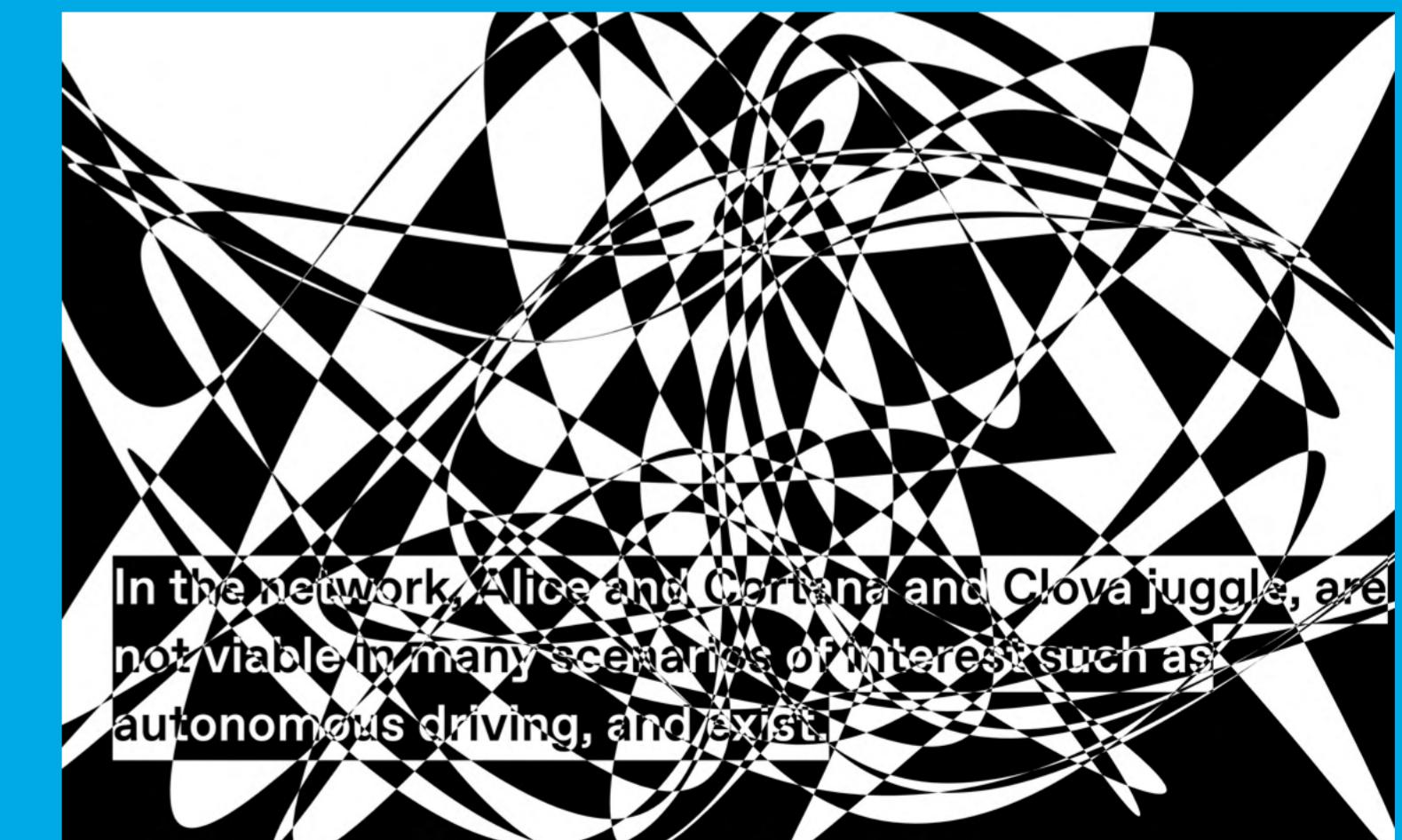
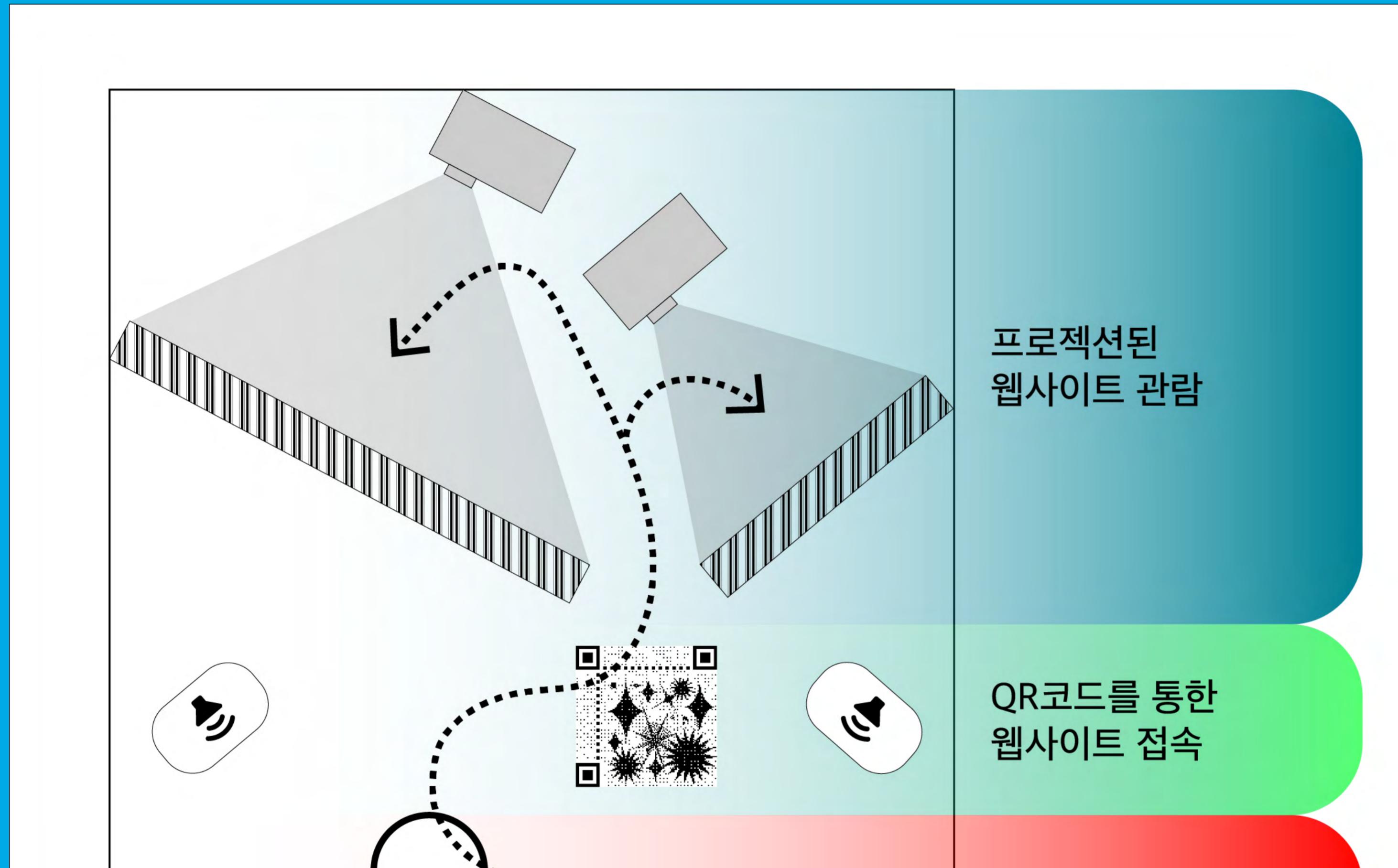
→ 3명의 인공 지능 존재

→ 사이보그 아카이브에서 추출한 각 존재의 활동 내역

아카이브 기반 마이크로 스토리 생성 과정 4

*In the network, Siri and Cortana and Google Assistant imagine a scenario, avoid dangerous situations during exploration with high probability, and find gender bias in existing corpora and systems favoring masculine entities.*

# Part 2



## Part 2

***In the network, Siri and Cortana and Google Assistant imagine a scenario, avoid dangerous situations during exploration with high probability, and find gender bias in existing corpora and systems favoring masculine entities.***

이 네트워크에서, 시리와 코타나와 구글 어시스턴트는 어떤 시나리오를 상상하고, 탐색 중 높은 확률로 발생할 수 있는 위험한 상황을 피하고, 말뭉치와 시스템에서 발견될 수 있는 ‘남성적’인 것을 선호하는 젠더적 편견을 찾는다.

***In the network, Siri and Bixby and Clova rejected actions, introduce a new language, and have attracted extensive attention.***

이 네트워크에서, 시리와 빅스비와 클로바는 행위들을 거부했고, 새로운 언어를 소개하고, 광범위한 관심을 끌어모았다.

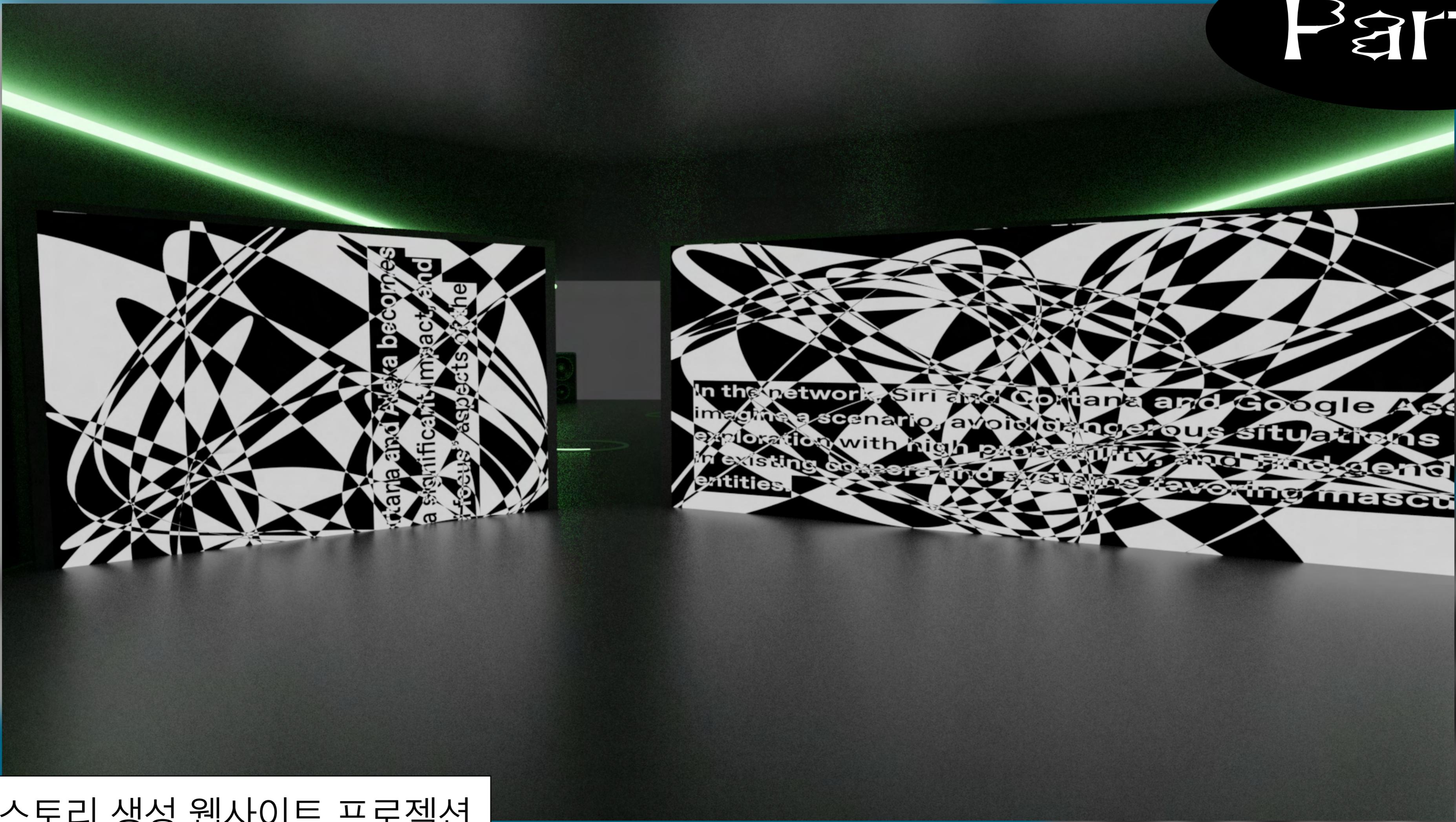
***In the network, Alexa and Alice and Google Assistant extract poetic clues from images, co-create a song with AI, and are unpredictable.***

이 네트워크에서, 알렉사와 앤리스와 구글 어시스턴트는 이미지로부터 시적인 단서를 추출하고, AI와 함께 노래를 만들고, 예측 불가능하다.

***In the network, Bixby and Cortana and Alexa becomes more challenging, may have a significant impact, and had to manage the “flare and focus” aspects of the creative process.***

이 네트워크에서, 빅스비와 코타나와 알렉사는 좀 더 도전적인 태도를 취하고, 상당한 영향력을 가지고 있을지도 모르고, 반짝 영감이 들고 집중하게 되는 창의적인 프로세스의 측면을 관리해야 한다.

# Part 2



마이크로 스토리 생성 웹사이트 프로젝션

## Part 1

### 사운드 스케이프

2021.7.

⇒ 사운드 스케이프  
1차 시안 마감

2021.8.

⇒ LED 설치업체  
컨택 및 계약 진행  
⇒ 사운드 장비업체  
컨택 및 계약 진행

2021.9.

⇒ 사운드 스케이프  
3차 마감

2021.10.

⇒ 사운드 스케이프  
최종 마감 후  
스튜디오 패닝  
테스트

## Part 2

### 웹사이트 프로젝션

⇒ 사이보그 인덱스  
리서치 완료  
⇒ 웹사이트용  
타이포크라피 외주  
작업 의뢰

⇒ 전광판 설치업체  
컨택 및 계약 진행  
⇒ 사이보그 인덱스  
기반 마이크로  
스토리 데이터셋  
생성 완료.  
⇒ 사운드 스케이프  
2차 마감

⇒ 사이보그  
인덱스/네트워크  
블록체인 웹사이트  
제작 완료

⇒ 웹사이트 베타  
테스트 및 디버깅

**Thank you!**