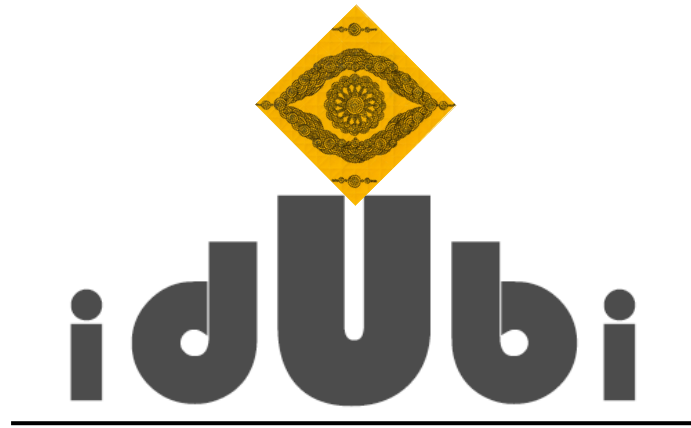


Berklee College of Music



[ai-dub-ai]

## **Dub Mix Live Set & VJing**

A Thesis Submitted in Partial Fulfillment of the Degree of  
Master of Music in Music Production, Technology and Innovation

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## **Abstract**

The purpose of this CE is to make three dub live performance sets with VJing by learning and exploring dub mix and DJing skills. The innovative aspects of the project are focused on bringing new elements to Korean classical music. Ableton Live, MIDI controller, DJing skills, and Visual tools were the most useful and inspiring programs and skills acquired during the process. The project is linked to the author's future plan, which is to widen her ability as a producer and collaborator so she can enrich Korean traditional music by incorporating sounds of dub music and other sub-genres.

*Keywords:* dub mix, Korean traditional music, DJing skills, VJing, future generation.

## 1. Introduction

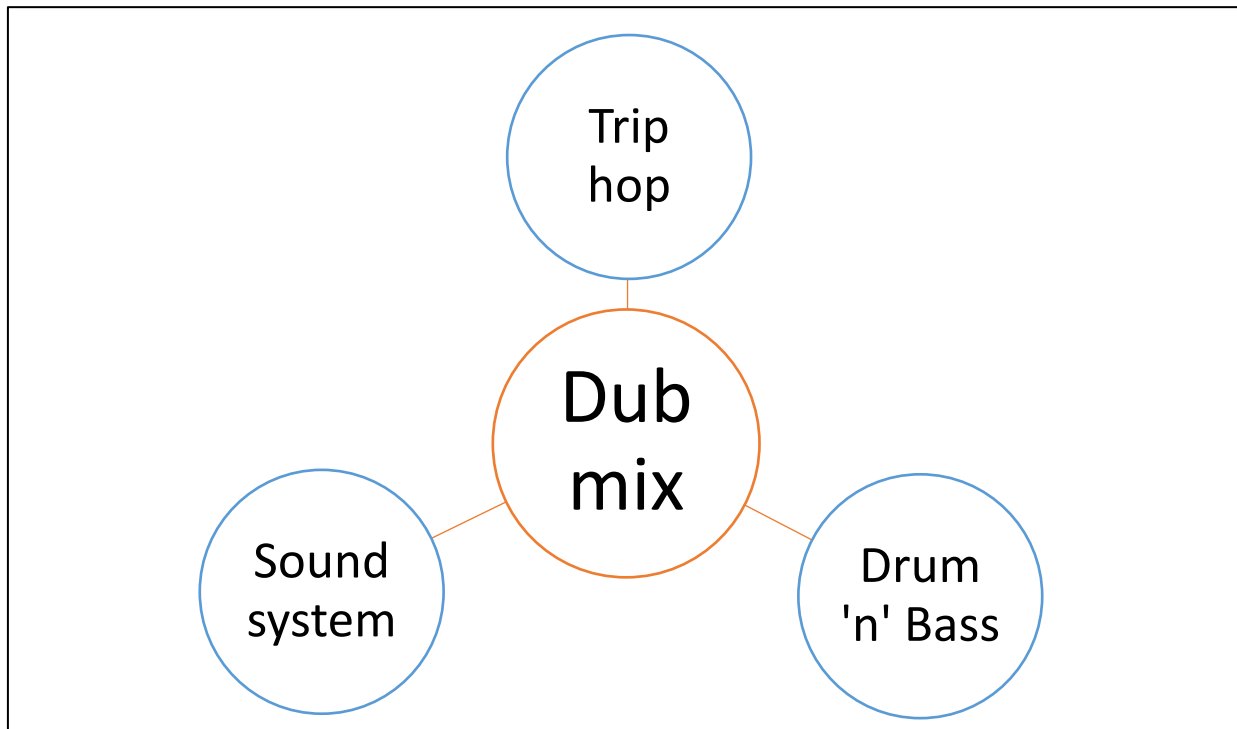


Figure 1. Three elements that led me to dub music.

### *What are the main influences?*

As a musician, joining an amateur band was important to learn the groove and energy of music. It was blues, funk and jazz-funk that the author played in many clubs in Seoul, Korea. After studying piano at Dongduk Women's University, she mainly listened to electronic rock (i.e., Depeche Mode, Nine Inch Nails), Big Beat (i.e., Chemical Brothers, Prodigy, Propellerheads, Fatboy Slim and Groove Armada), Trip Hop (i.e., Massive Attack, Tricky and Portishead), Jungle/ Drum 'n' Bass (i.e., Leftfield, Crystal Method, Roni Size), and Progressive House such as Underworld. Hypnotic synth and bass dominant sound captured her ears.

In 2007, there was a chance for the author to audition for a reggae band. This was how she got to know that Trip Hop originated mainly from sound system which was born in the reggae movement. Hence, she joined the reggae band, starting another dub band at the same

time. She learned through these two bands what made the sound which she loves, while also learning other reggae related musical genre, such as ska, afro-Cuban, Ethiopian music, etc. It was her first dub experience in Korea when a dub scene had not existed at that time.<sup>1</sup>

During her studies in France (from 2011 to 2017), some of the best electroacoustic composers, such as Michele Bokanowski<sup>2</sup> and Bernard Parmegiani,<sup>3</sup> led the author to increasingly rethink how to make the sound in different ways.

### ***Why do I choose dub and DJing skills as my new artistic tool?***

“Everything can be dub.” Lee Scratch Perry once said in an interview in the film *Dub Echoes*.<sup>4</sup> It is kind of sound style, not a specific musical genre. It is all about creativity and how far one can experiment sound with very simple tools. The colour that the creator adds changes the whole picture of dub. It was a valuable experience that she worked for the dub band with a traditional Korean vocal. Through making dub with her own hand, now she would like to define what makes dub, and use the dub skills as a practical composition tool.

On top of that, it was from Ben Cantil’s “Electronic Production Live Performance” class in the Fall semester 2017 that the author learned about dub mixing and remixing skills. DJing technique from Nacho Marco’s “DJing and Turntablism” class in the second semester, which started with scratch masterclass with Steven Webber, AKA Professor Scratch, was also a large inspiration. It was a perfect chance for her to start the idea that she has had in mind for a long time.

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<sup>1</sup> “Heavyweight + version”, created by I & 1 Djangdan, posted by massivedubclub, October 18, 2012, YouTube video, 8:42, [https://www.youtube.com/watch?v=Xu-A-6kwHRC&index=6&list=PLSkzUVEyk5O5d5nP\\_re9rtw34\\_bqda-po](https://www.youtube.com/watch?v=Xu-A-6kwHRC&index=6&list=PLSkzUVEyk5O5d5nP_re9rtw34_bqda-po).

<sup>2</sup> “Tabou”, created by Michèle Bokanowski, posted by Tristan Koreya, August 28, 2012, YouTube video, 16:16, <https://www.youtube.com/watch?v=sGLCIHaS5P4>.

<sup>3</sup> “La Roue Ferris”, created by Bernard Parmegiani, posted by raydenzero, July 11, 2011, YouTube video, 10:44, <https://www.youtube.com/watch?v=Ge19MFsGOEo>.

<sup>4</sup> Bruno Natal, *Dub Echoes*, DVD-ROM, (Soul Jazz Records, 2009).

## 2. Review of the state of the art

What she focused on is more on the creativity of artists' work, rather than on a certain type of genre or style. This section is divided into two major sections: pioneer of dub mix and dub musicians.

### *Pioneer of Dub Mix*

Lee “Scratch” Perry<sup>5</sup> was born in 1936. Some brief biographical information is presented in several media, with the following information:

He is a Jamaican music producer and pioneer who is famous for his innovative studio techniques and production style. He was also an inventor in the 1970s development of dub music with his early adoption of remixing and studio effects to develop new instrumental or vocal versions of existing reggae tracks. He has worked with and produced for a wide variety of artists such as Bob Marley, Adrian Sherwood, and many others.<sup>6</sup>

### *Dub Musicians*

While there are plenty of dub musicians, only five of them who have had essential influences on dub mix are introduced here. First of all, Aswad<sup>7</sup> is a British reggae band. Their musical structure is simple but they use a lot of bold dub mix skills which can make their music unique and sensational. The specialty of their music is the transformed piano sound. Secondly, Adrian Sherwood<sup>8</sup> is one of the most important figures in the dub scene. It is considered that “his wide range of work is remarkable. As a recording producer specializing

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<sup>5</sup> “Studio Black Ark”, created by Lee Scratch Perry, posted by Nicolas Bonnet, October 14, 2009, YouTube video, 4:43, <https://www.youtube.com/watch?v=y651C7aNXRc>.

<sup>6</sup> “Lee “Scratch” Perry”, Wikipedia, accessed March 5, 2018, [https://en.wikipedia.org/wiki/Lee\\_%22Scratch%22\\_Perry](https://en.wikipedia.org/wiki/Lee_%22Scratch%22_Perry).

<sup>7</sup> “Dub Fire”, created by Aswad, posted by Kayani, March 11, 2008, YouTube video, 4:27, <https://www.youtube.com/watch?v=6GWw0hwjLxM>.

<sup>8</sup> “Boogaloo”, created by Adrian Sherwood, posted by Taxcider, October 14, 2008, YouTube video, 5:32, <https://www.youtube.com/watch?v=T1Pc5YckBq8&feature=share>.

in the genres of dub and EDM, he has created a distinctive production style based on the application of dub effects and dub mixing techniques to EDM tracks as well as mainstream songs.”<sup>9</sup> Third, Budos Band is an American dub in a brass band format.<sup>10</sup> Their music is under the influences of Ethiopian music. The Vox organ sound makes their music sound unique. Fourth, High Tone<sup>11</sup> is an outstanding French dub bands, based in Lyon, France. Their style explores with a various palette of sound sources originally. The last musician is Burial,<sup>12</sup> who is a British electronic musician based in London. His music style is more like future garage, dubstep, ambient and jungle music. He represents a sophisticate younger generation for the dub scene.

### **3. Description of the CE**

The main purpose of this project is to learn new music techniques, mainly dub mixing and DJing skills to enhance the author’s artistic identity. Two main projects were completed by combining the classes mentioned above with personal study time to develop: (1) a three dub mix set and VJing, and (2) live performance video footage. All of these materials are included in the portfolio.

In order to develop her new artistic identity, the following objectives are achieved:

- 1) to learn dub mixing and DJing skills to embrace new composing techniques and live performance tools.

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<sup>9</sup> “Adrian Sherwood”, Wikipedia, accessed March 6, 2018, [https://en.wikipedia.org/wiki/Adrian\\_Sherwood](https://en.wikipedia.org/wiki/Adrian_Sherwood).

<sup>10</sup> “Chicago Falcon”, created by The Budos Band, posted by dragans82, September 14, 2011, YouTube video, 2:53, <https://www.youtube.com/watch?v=NuOKhfNq-IE>.

<sup>11</sup> “Until the last drop”, created by High Tone (feat. Shanti D.), posted by Jarring Effects Channel, March 21, 2014, YouTube video, 4:13, <https://www.youtube.com/watch?v=wryTpZoLq4o>.

<sup>12</sup> “Archangel (Hyperdub 2007)”, created by Burial, posted by Hyperdubrecords, April 3, 2013, YouTube video, 3:58, [https://www.youtube.com/watch?v=8k\\_f2QK77ew](https://www.youtube.com/watch?v=8k_f2QK77ew).

- 2) to communicate and interact with other artists through new musical tools.
- 3) to create a series of tracks and video production to put all of these new skills into practice.
- 4) to improve the artistic portfolio with these materials.

### ***Deliverables***

As a result of this project, these deliverables were completed:

A. Three dub mix set:

1) idubi Mix 1

Baetteuwora *배 띄워라* “set a ship afloat”: vocal sample from the song

Baetteuwora, composed by Beom-hoon Park, sung by So-hee Song.

It was sung by a young Korean traditional singer. The author chose this extract because of its texture while she was following the singer’s performances from early days. The variable inner process, which seems stable but offers many musical accents was impressive. It is a sort of call or command to have set a ship afloat of our kaleidoscope of life. The author has a plan to collaborate with the singer who represents the young generation which has different musical tastes.

2) idubi Mix 2

Saetaryung *새타령* “bird ballad”: vocal sample from a Korean traditional folk

song Saetaryung, sung by So-hee Kim.



So-hee Kim is Sook-sun Ahn's master. That was the chance for the author to look her voice up to use it as another vocal sample. The song speaks about ordinary people's lives comparing them to birds.

### 3) idubi Mix 3

Heungboga 흥부가 "story of Heungbo": vocal sample from a Korean traditional folk song Heungboga, sung by Sook-sun Ahn.

The lyrics tell a story of Heungbo's family, who were extremely poor but Heungbo was a good man while his elder brother Nolbu was rich and mean. One day, Heungbo started to cut a gourd in two with his wife. And what was inside of the gourd was, surprisingly enough, rice, cloths made of silk, and gold coin, etc. Sook-sun Ahn is one of the most influential Korean Traditional singers of our time. The author has heard a lot her voice on TV while she was growing up. And she picked this extract up because the singer told a story to the audience.

### B. Video production of dub live set with VJing (video footage)

This video was recorded in the scoring stage (AKSS) on Valencia Campus and at the club Tosca Llar in Valencia, Spain.

## 4. Innovation aspects

Everything was new for the author. All the tools she used for her dub mix and VJing were those the author acquired from the classes and office hours at Berklee Valencia. The most innovative aspect was physically performing while making dub. She usually sits and is

immobile in front of a computer screen when she composes electroacoustic pieces. Recording and transforming sound moving physically is what she has wanted to do for a long time when composing. In addition, this project is meant for a broader audience, not just Korean population but also Western audience, and this music has been transformed to meet a wider taste. This project intends to be just the beginning. For the author, it is important to bring new elements to Korean traditional music. She is aware that it is going to be a huge challenge due to the Korean government policy on art. Therefore, her strategy is to promote this type of music starting outside of Korea, and then eventually bring it back to her native country.

## **5. New skills acquired**

The author has acquired new artistic tools, which were quite diverse: from basic dub mixing skills to visual tools. Cut (momentary muting of a track) and Throw (momentarily cranking up the send knob to a long delay or reverb) are the most common basic dub mix techniques since Lee “Scratch” Perry. When it comes to making and performing music, Ableton Live (DAW) and MIDI controller were the centres of her work. Understanding and recording analog synthesizers helped her a lot to apply the knowledge to plug-ins (virtual instruments and effects) on Ableton Live. DJing skills were another one of the most inspiring elements during the whole process.

The VJing process brought quite surprising results. After scanning each piece, Key Light on After Effects was used to extract only the lines of the drawing. Adding Hue/Saturation gave color change to the lines. On top of that, an expression tool was applied on Position and Rotations (x,y,z) of the layers to code them so that they could rotate or move gradually in three dimensions. Since it was her first time using these visual tools, she tried to apply various effects and use all those that worked effectively.

## 6. Challenges

### *Expected*

It was in the Fall semester in 2017 when the author started to use Ableton Live at Berklee. Figuring out how to skillfully use a session view of Ableton Live for live performance took her some time. Choosing a midi controller and mapping on it efficiently was another challenge. After trying a couple of MIDI controllers, such as Akai APC40 series and Novation Launchcontrol XL, her final choice was the Novation. Its simple features and necessary minimum functions for dub mixing helped her make a decision. Although the author's laptop was not in optimal conditions, fortunately and thankfully, no serious problem occurred. However, it's still hard to link more than two software in real time. Therefore, she currently performs only with Ableton Live and Resolume on stage without using MAX at the same time. Finally, as she used vocal samples from CDs or YouTube, getting permission was a hassle but an indispensable process. She contacted to the vocalists through one of her musician friends in Korea. One of them agreed, Sook-sun Ahn, while the process is still ongoing with the others.

### *Unexpected*

The author's initial CE subject intended to focus on the organ, as it is her favorite instrument. Taking "Applied Analog Synthesis" class helped her to understand the mechanics of the organ and drove her to choose this subject as the CE. Nevertheless, it turned out to be realistically impossible to have a real organ (either Hammond B3, Farfisa or Vox), therefore, she had to shift her CE toward dub mixing, which is her other passion since she lived in Korea.

## ***Drawings and VJing***

She had not thought that she could use her drawings for VJing until right before the second CE prototype presentation. However, when she introduced the drawings at the presentation, she got some feedback that it would be great to combine with her dub mix. The drawings were colorful, geometric and symmetric. By using the maximum of Jon Forsyth's office hours, she made some clips for VJing and put them in the Resolume in order to synchronize to the bpm. However, in order to get them in high resolution, her friend had to send them physically to campus and it took almost three weeks to arrive from Paris to Valencia. Learning Premier Pro and other visual tools such as Photo Shop, After Effects and Resolume were essential to animate the drawings. On top of that, V synth of MAX MSP was very useful to get some abstract images which could be combined with the clips from the drawings. She struggled a lot until she achieved positive results, although some were unexpected.

## **7. Future ramifications**

There are a lot of dub related labels especially in France and in the UK, such as Jarring effects, Hammerbass, Wagram Music, Rootical Attack, Feldub, Panda Dub, Dub Vender, Vibronics, Dub Organizer, University of Dub and Hyperdub, etc. The author's plan is to initially apply to as many labels and festivals as possible so as to experience the European dub scene from her basecamp in France. Telerama Dub Festival and Nuits Sonores are some of her biggest goals. Secondly, since she has been away from her home country for a while, getting to know about the change of the Korean music scene and taste of audience is one of the most crucial tasks before returning to Korea.

It would be great if the author had remixed or made different versions of the dub mix. That also means more collaborations with various musicians. As influenced by Trip-hop,

Drum & Bass and Big Beat, she would love to adapt different kinds of related styles such as Dub Step, Trap, Deep House, etc. Working with real traditional Korean Master singers, especially artists from the young generation, would upgrade this project as she considers that performing with a real Korean singer gives the audience a larger impact and is more dynamic. Besides, young artists are more familiar with electronic style sounds and they are often willing to find a new sound. If she has a chance to learn a new instrument, she will definitely learn one of the traditional Korean rhythmic instruments such as Kkwaenggari (small gong) to enhance her live performance.

IMS Ibiza showed that there are currently many projects and efforts to change the EDM and DJing field and make it healthier. Some of the IMS sessions such as ‘Drug Testing at Events’, ‘How to make payments to musicians in the streaming dominant situation’, or ‘Practical Parenting’, and ‘Music Against Animal Cruelty (MAAC)’ were unfamiliar topics, but some that she considered critical for the future of the field. She would like to participate and promote these types of movements in the music scene where she belongs.

## **8. Conclusion**

It is true that there are several limitations in terms of time, budgeting and scheduling of the MPTI Master program. Although her initial goal was a dub live mix with real instruments, she has been focusing on learning dub mixing and DJing skills. Since she works with these tools every-day in her classes, they helped her achieve the main goal of this project. However, that also meant that everything was new and challenging for her.

She hopes that this project not only helps to add new expression possibilities to her musicianship, but also helps her connect with a vast range of artists. Accomplishing this project will help her achieve the original goal of studying in Valencia, which was to figure out how to connect all different styles she has worked in so far, and to create her own artistic

identity. The author's contribution of this project to the music field is to inspire and add a new connection to Korean traditional music. This way we can broaden and enrich people's perceptions and increase creativity in music.

## **Appendix A: Resources**

### *MATERIALS*

- 1) SSD Toshiba OCZ TR150
- 2) Sandisk Ultra 32GB, Clase 10, 80MB/s
- 3) Alpine MusicSafe Pro Ear plugs

### *HARDWARE*

- 1) UE ROLL2 (Bluetooth speaker)
- 2) Canon EOS 700D
- 3) MacBook Pro 13”
- 4) Novation Launchcontrol XL
- 5) Roland DJ 808

### *SOFTWARE*

- 1) Pro Tools 12
- 2) Ableton Live 10 Suite
- 3) Serato DJ Pro 2.0.1
- 4) Cycling 74 Max 7.3.4
- 5) Syphone Recorder
- 6) Premiere Pro CC 2017
- 7) Photoshop CC 2017
- 8) After Effects CC 2017
- 9) Resolume Arena 5.0.4
- 10) Splice

### *FACILITIES*

- 1) B87 DJ Lab, Valencia Campus
- 2) Studio A, B, C, D, Valencia Campus
- 3) Scoring Stage (AKSS), Valencia Campus
- 4) Home Studio (Carrer del Pare Tomàs de Montañana, 22, 46023, València, Spain)

### *PERSONEL*

- 1) Camera men
- 2) Mixing and mastering Engineer
- 3) Musicians (in case of collaboration)

## Appendix B: Budget

UNITS	ITEMS	PROPOSED
<b>MATERIALS</b>		
4	Cables	0€
1	SD card	18,94€
1	SSD	150,00€
5	Vinyl	0€
1	Ear plugs	16,90€
<b>EQUIPMENT</b>		
<b>Hardware</b>		
1	Laptop	0€
1	Camera	0€
1	Tripod	0€
1	Turntable	0€
1	Control mixer	133,00€
1	MIDI Keyboard	0€
1	Sound card	0€
6	5.1 system speakers	0€
2	Monitor speakers	0€
1	Headphone	0€
1	Mobile phone	350,00€
1	Erica modular synth	0€
<b>Software</b>		
1	Pro Tools	0€
1	Ableton Live	359,00€
1	Serato DJ	0€
1	Cycling 74' MAX	51,00€
1	Premier Pro	0€
1	Microsoft Office	0€
1	Adobe Creative Suite	0€
1	Resolume Arena 5	0€
<b>VENUE</b>		
<b>PERSONNEL</b>		
3	Musicians	
1	Engineers	
1	Camera man	
<b>TRAVEL</b>		
	Bus	102,00€
	Taxi	100,00€
	Airplane	200,00€
<b>OVERHEADS</b>		
1	Internet	198,00€
1	Water	10,00€
1	Electricity	180,00€



1	Phone Service	60,00€
1	Food	100,00€
1	Stationary	3300,00€
1	Etc.	300,00€
<b>TOTAL:</b>		<b>5.628,84€</b>

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<https://www.youtube.com/watch?v=wryTpZoLq4o>