



HNC Sound Production

History of the Audio Industries (SCQF level 8)

Unit Code: DJ24 35

Lo2 - History of the Audio Industries Report

Research Title: The Evolution of Samplers

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Description of the investigated area of the Audio Industry or Audio Technologies

(150 Words):

The area I investigated was the evolution of samplers which now seem like such a dated piece of technology with the invention of DAWs, but at the time this technology was groundbreaking and shaped the music industry over the course of a few decades. Samplers allowed anyone, regardless of music knowledge, to capture and manipulate audio to create new music. They very quickly became the foundation of hip-hop being used by pioneers such as Dj Premier and RZA or those taking it to the extreme such as DJ Shadow with Endtroducing. Samplers also came to play a huge role in electronic music within genres of electronic music being used by groups like Daft Punk and The Chemical Brothers. Samplers allowed for new ways to experiment with sounds and sound design, helping to create a long list of subgenres. This technology really pushed sampling into mainstream music, a trend that continues with big hits today.

Explanation how the research for this report was carried out (noting any key resources)

(150 Words):

Part of the reason I chose to investigate this area was because I already had decent knowledge of samplers, the genres that were influenced by them and the people that used them. This means that many details I used are bits of information I have picked up from various sources over the years and through my own use of samplers. Much of this comes from looking into gear and methods used to create songs I love as well as watching interviews with the artists that created these songs. I did, however, need to investigate the early stages of sampling with research and thought it best to double check my already known facts for the later stages to ensure they are correct. I found my information for the early stages in a couple of articles talking specifically about the early technologies and the rest from articles talking about general sampling as well as from the Roger Linn (a key figure in the development of samplers) Designs website.

Discussion of the initial needs for the chosen technologies and the early stages of development (200 Words):

The very first sampler, The Chamberlin, came around because Harry Chamberlain decided he wanted to be able to play any instrument while only knowing how to play the keyboard. His design was stolen and turned into the inferior but better known mellotron. The Fairlight CMI was the next big step which was a synthesiser with sampling capabilities. One of the designers discovered while developing the machine that a recorded piano sound pitched up and down sound better than a synthesised one, so this capability was added. A few samplers come after, but in 1986 Akai released the S900 rack mounted sampler. This was a huge leap in sample time

and quality. The S series continued for a while, but the big direction change for samplers would come in 1987 with the E-mu SP1200. For hip-hop it removed the limitation of having two repeating records and gave infinite possibilities. It removed the complexity of the older samplers, having only eight buttons that samples could be mapped to meaning no understanding of a keyboard was needed. In 1988 Akai releases the game changing MPC 60 Midi Sequencer which was developed with help from the legendary Roger Linn and is the general design you think of when you hear the word sampler. It allowed the user to record and manipulate samples then assign them to any of the sixteen drum pads. The user could then begin to record hitting the pads and this could be played back or edited from within the machine. Samplers peaked at this design and didn't evolve much from there other than being made digital for inside of DAWs.

Discussion/description of key practitioners, pioneers, manufacturers and/or important figures and how they contributed to the advances in this area/technology (200 Words):

One of the biggest adopters of the Fairlight CMI in pop music was Kate Bush. She personally used the sampler on some of her biggest hits such as Running Up That Hill and Babushka. Roger Linn, who created the Linn Drumm, is the man that created the MPC 60 which completely changed the sampling game as it allowed samples to be played and edited in an entirely new and more convenient way. Some of the most influential hip-groups of the 80s, NWA and Public Enemy, were known to have used the SP1200 and MPC 60. It is safe to say that they, along with others in that era, heavily influenced the advance of hip-hop. On the electronic side we have people like Daft Punk using samplers for the creation of French House with Homework and Aphex Twin with his insane sound design pushing the boundaries on what electronic music can be.

A conclusion of the findings and a short evaluation of the investigation (150 Words):

In conclusion, the evolution of samplers and sampling have had an enormous and lasting impact on music, particularly in hip-hop and electronic music, that cannot be denied. Samplers opened the gates of music creation to a wider audience which naturally allowed more people to experiment and create their own new sounds. I have found the word count for this investigation to be quite limiting, however, had my planning for the report been done better this may not have been such a large issue. If I were to do this report again, I would also give myself more time to write rather than leaving it to the last minute to better filter out unnecessary information and do some deeper research.

Bibliography:

Linn, R. (n.d.). About Roger Linn Design. [online] Available at: <https://www.rogerlinndesign.com/about/about-roger-linn-design>.

Epand, Len. "A Phantom Orchestra at Your Fingertips." *Crawdaddy*, no. 33982-059 IND, Apr. 1976, pp. 27–28, www.outofphase.fr/wp-content/uploads/2018/11/harry_chamberlin_crawdaddy76.pdf.

Bricio, C. (2023). The Art of Sampling in Music | a Guide to Get You Started. [online] United Kingdom. Available at: <https://abbeyroadinstitute.co.uk/blog/the-art-of-sampling-in-music/>.

McNamee, D. (2018). Hey, what's that sound: Sampler. [online] the Guardian. Available at: <https://www.theguardian.com/music/2009/sep/28/whats-that-sound-sampler>.

Robb, H. (2015). An Orchestra at your Fingertips: the Chamberlin and Mellotron Tape Replay Keyboards. [online] Amplify. Available at: <https://amplify.nmc.ca/an-orchestra-at-your-fingertips/>.

Lacedelli, S. (2015). The Fairlight CMI: The secret composer of the music you love. [online] Available at: <https://blog.scienceandmediamuseum.org.uk/fairlight-cmi-playlist/>.

Howell, S. (2005). The Lost Art Of Sampling: Part 1. [online] Soundonsound.com. Available at: <https://www.soundonsound.com/techniques/lost-art-sampling-part-1>.

Brewster, Will (2022). The Fairlight CMI: How two Australians took sampling from their shed to the world stage. [online] Mixdown Magazine. Available at: <https://mixdownmag.com.au/features/the-fairlight-cmi-how-two-australians-took-sampling-from-their-shed-to-the-world-stage/>.