

The Monthly Acid Pattern – an accessible notation system for Acid House collaboration

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ABSTRACT

Scholars continue to investigate how communities are built by sharing histories, norms and values within the ‘third spaces’ enabled by social media technologies. How can these third spaces be harnessed to explore collaborative and experimental compositional practices, and, in turn, what can practising music as a ‘shareable’ culture reveal about community building as it shifts to digital platforms. The Monthly Acid Pattern Group used the compositional schematic of the Acid Pattern and a particular analogue synthesizer, the Roland TB-303, as the basis for the sustained production of interpretative works using online collaborative and publishing platforms over a four-year period. This project contributed to further understanding of how the practices and cultures of music composition are shared and can build community. With the use of an emerging online platform (SoundCloud), the research project made an innovative contribution to methodologies of documenting, and enabling, the interpretative practices of an online community as it emerged. The works that were created demonstrated new possibilities for accessible modes of notation, instrumentality and compositions within digital music cultures.

1. INTRODUCTION

An Acid Pattern is the melodic element of an electro acoustic composition in the Acid House musical genre. The Monthly Acid Pattern Group posted an original Acid Pattern each month and members of the community created their own renditions of each month’s pattern.

The Monthly Acid Pattern Group was community of the third sector [1], collaborative music project based around the Acid House music genre, the Roland TB-303 monophonic synthesizer and the visual representation of the music notation for this instrument. This community had a measure of commitment to a set of shared values, norms,

meanings, history and identity, in short to a particular culture[2].

The aim of the research was to explore of the notation system used for the Monthly Acid Pattern. Each month’s Acid Pattern and its particular visual representation was the starting point for a range of reinterpretations and renditions. In addition, this research observed the building and development a community of the third space as defined by Rose [3] and Etzioni [2]. This community building and development occurred on the SoundCloud¹ platform within its defined group structures functionality. This group featured allowed a shared space to share music and forum space for group discussion. SoundCloud hosting of music also allows for users to comment the original pattern and on particular users’ renditions. SoundCloud has since removed its’ group functionality.

2. RESEARCH CONTRIBUTION

Acid House Music has been identified as a strong contributor to youth cultural identity but the mechanism of production has not been studied in any depth [4]. This research has two main contributions to the field. A unique system of the musical notation based specifically for the melodic component of Acid House music and the instrument which defined the Acid House sound, the Roland TB-303 instrument and varied body of new music created utilizing this system. Secondly whilst Acid House has a strong place based cultural identity [5] an unexpected output of this research was the development of a global community of musicians that came together because of a particular shared cultural bond, this community building gives support to Rose’s [1] definition of the community of the third space and also gives weight to Young’s [6] argument that community has no need to be face to face.

3. METHOD

3.1 Data Sources

The data that was analysed consisted of the monthly acid patterns submitted by various musicians over a four year period from 2011 until 2015. These acid patterns were a series of graphical representations of the TB-303 melodic contribution to the electro-acoustical composition. In addition, data was gathered from each month’s recordings of

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¹ <http://www.soundcloud.com>

the original composition and the range of renditions made from each month's Acid Pattern. Further data was gathered from the feedback and comments of the pattern writers and contributors to the recordings on SoundCloud.

3.2 Data Analysis

Content Analysis, described as a flexible method of text analysis [7] was used to analyze the data. Content Analysis has been used in many studies [8] and the number of studies reporting the use of content analysis has steadily increased since 1991 [9]. Content Analysis can be used to analyze a range of text data, such as text in audio, print, or electronic format. This text data can be obtained from a range of sources; interviews, focus groups, observations, articles, books and manuals[9]. As stated in previous section the data analyzed was drawn from the Monthly Acid Patterns submitted to SoundCloud by each musician and the renditions of those patterns by contributing musicians. The collation of this data assisted in understanding the themes and activities involved [8], [10]. The technique of immersion in the data helped identify key themes and supported the development of the initial coding scheme for the data. These codes were organized into related categories such as clarity, communication, notation and other variables [11] These approaches to coding incorporated both conventional content analysis to develop codes and direct content analysis techniques to identify variables [9] It is recommended to have multiple researchers working on coding [12] to ensure reliability of the coding process. To ensure the coding schemas that were developed for data analysis were reliable, they were checked and refined throughout the coding process with the research peers. The data was used for several distinct purposes. Firstly, to identify the variables in approaches to device specific musical notation. Secondly, the data gave insights into how online co-creation gave rise to a community of musical practice amongst geographically diverse group of musicians.

Thirdly, these renditions presented a narrative of each month's Acid Pattern, the activities that occurred and the processes and practices used within those activities. The narrative identified key points in each month and these were mapped to the stages of the groups processes where possible. The narrative of each month gave greater insight into the suitability of the Acid Pattern as a notation system and the community's development and growth.

4. RESULTS

4.1 The TB-303

To program the TB-303's sequencer the musician needed to know a number of variables, pattern length, pitch data, pitch modification and time data. To communicate this information as an Acid Pattern the musician had to be able to describe the pattern length, n-16 steps, with the ability to chain up to 4 patterns. The pitch data, which note on which step. The pitch modifications, such as transpose up, transpose down, slide and accent. In addition, the musician

also had to be able to communicate the time data for each step, whole note, tie or rest. Finally, the musician had to communicate the Acid Pattern using an accessible notation system because the majority of Acid Pattern Group's community did not have sight reading or ear playing skills. As demonstrated in Figure 1 the TB-303 utilizes both traditional Western notational elements and more accessible elements. The pitches are described using letters, as are the pitch modification such as slide, accent, transpose down and up. The time data uses symbols and notion for note, tie and rest.

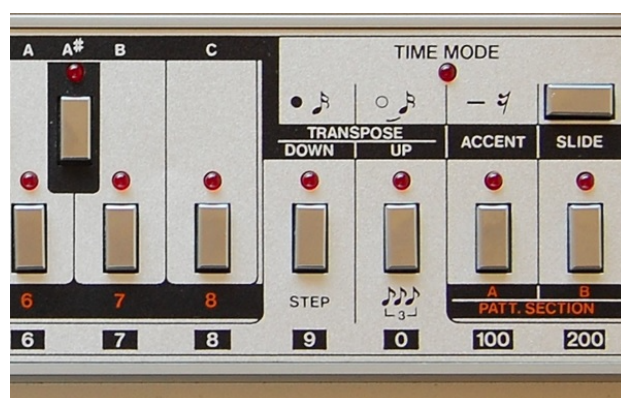


Figure 1. The TB303.

4.2 The Acid Patterns

The Acid Pattern Group utilized a predefined pattern sheet to clearly communicate the pitch data, pitch modifications and time data necessary to successfully program the pattern into the TB-303 as illustrated in Figure 2. This allowed each musician to communicate which note, the particular pitch modification on each note, transpose, accent or slide and also the timing data, note, tie or rest. In the pattern sheet the time data uses only the symbol form from the TB-303, rather than the notional explanation. Due to the specific way in which the TB-303 is programmed the pitch data and time data are entered separately. The pattern sheet also allowed the musicians to enter further instruction regarding each pattern and for retrieval purposes denote which memory slot on the TB-303 they had written the pattern.

Roland TB-303

Author:												I II III IV				
Title:												A B				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Note																
Down / Up																
Accent / Slide																
● ○ -																
EFX / Notes:																
WAVEFORM:																

Figure 2. Blank TB303 pattern sheet.

As demonstrated in Figure 3, Mike Dred utilizes the pattern sheet to communicate to other group members the pitch data for each step of the pattern in the form of the note and the pitch modifications, in this case transpose down an octave, transpose up an octave and utilize the accent. This particular pattern's time data is straightforward with no ties or rests. The use of notes section allows the musician to further communicate information regarding the pattern and how to perform it, such as using the note transpose function on the TB-303 whilst the pattern is playing.

Author: Mike Dred												I II III IV				
Title: SOCIOSEXUAL												A B				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Note	C	G	C	C#	C	C	C#	C#	C#	C	C	C	C	G	C	C
Down / Up	D					D	U	D					D	U	D	
Accent / Slide	A			A			A					A		A		
● ○ -	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
EFX / Notes: The main riff from SOCIOSEXUAL off the new Record OVERMIND: TUNE:10 WF: Sq Time:/...../..... (16 notes) Cda, G, C, C#a / C, CD, C#ua, C#d / C#, C, C, Cda / C, Gua, Cd, C Transposition alternates between no transpose and C2 http://mikedred.bandcamp.com/track/sociosexual																
WAVEFORM:																

Figure 3. Mike Dred's acid pattern sheet for Sociosexual February 2014. <https://acidpattern.bandcamp.com> (2014)

Figure 4. Acid Bat's acid pattern sheet for September 2014. <https://acidpattern.bandcamp.com> (2014)

As documented in Figure 4, musicians also created their own pattern sheets utilizing whatever notation tools they had on hand, but these bespoke pattern sheets still communicate the required information. Much like the bespoke pattern documented in Figure 5 both musicians eschew the group pattern sheet for a DIY version that uses very similar grid representation to display the month's acid pattern.

Figure 5. 'King Mental's acid pattern sheet for April 2014. <https://acidpattern.bandcamp.com> (2014)

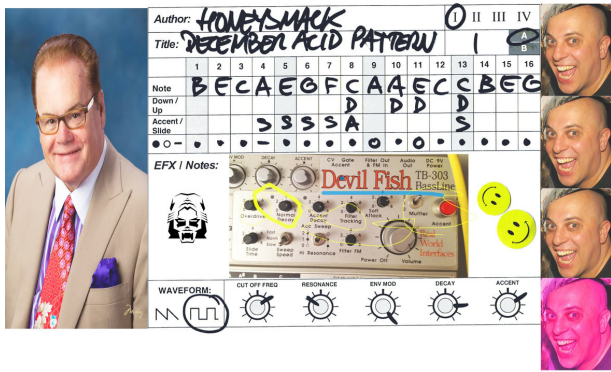


Figure 6. Honeysmack's acid pattern sheet for December 2014. <https://acidpattern.bandcamp.com> (2014)

In addition to bespoke pattern sheets, musicians would also customize the group pattern sheets with elements of their personal brand, as demonstrated in Figure 6. In addition to the personal branding, Figure 6 also demonstrates the use of ties and rests in the time data section of the pattern sheet.

Another common element across the majority of the acid patterns was the pattern length, very few patterns were more than 1 bar, though some such as documented Figure 2 had transposed variations.

4.3 Online Community

SoundCloud's interactive comments allowed musicians to interact directly with the pattern writer and the pattern creators to interact with those creating renditions of their patterns. Comments were for the most part positive, and related to various aspect of the pattern and its character. In addition, there were comments around the inspiration behind the pattern, the types of accompanying machines used and other comments of technical nature.

5. FINDINGS

The Acid Pattern demonstrates an example of accessible musical notation system that is genre specific, Acid House music and machine specific, for the TB303 sequencer. The Acid Pattern notation removes the need for sight reading skills, which can cause recognition errors with musicians [13]. The pitch data was limited to single notes because the TB-303 is a monophonic synthesizer and transcribed using the letters as notes that appear on the TB-303 as shown in Figure 1. The pitch data modification such as slide, accent whilst part of traditional Western musical notation had to be communicated in an accessible way that the participating musicians could understand, and in keeping with the design of the TB-303. The same consideration had to be given to up and down transpose modification. The specific style of the TB-303's sequencer which separates the entry of time and pitch data meant any user of the TB-303 could enter the pitch data and then the time data and get the correct pattern. The TB-303 is not played in the traditional

sense, patterns such as those shown in Figures 3, 4, 5, 6 are programed into it and then the sequencer is started, there is no need for the musicians to audiate [14] the pattern from the notation and if musicians are unable to transcribe

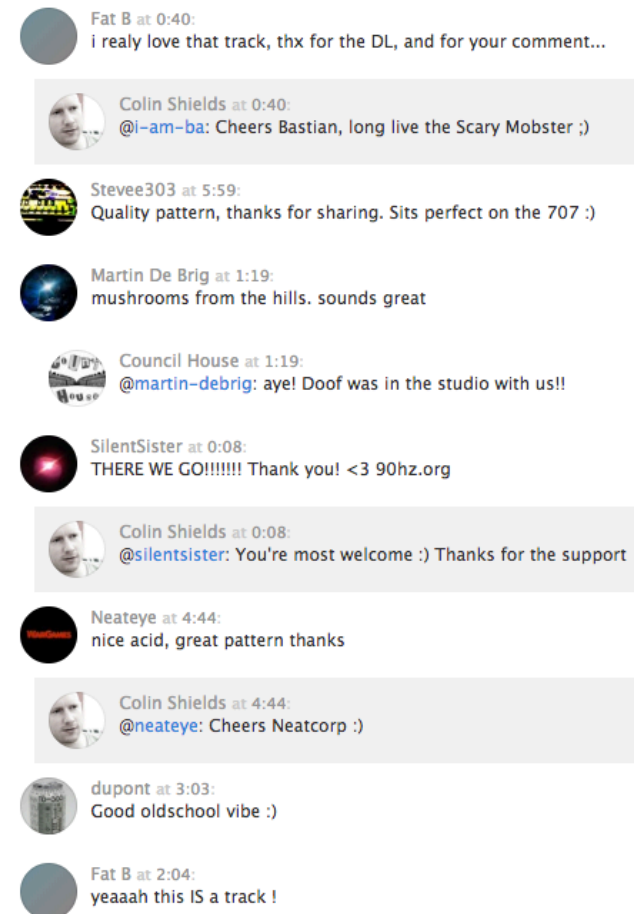


Figure 7. SoundCloud comments on July Acid Pattern 2011 : The Acid North (Moody B & Colin Shields) - Acid in the Hills. <https://soundcloud.com/colin-shields/july-acid-pattern-the-acid> (2011)

the pattern from listening are also able to input the correct pattern using this notation system.

The Acid Pattern Group's success can be seen in the creation of original music, one original acid score each month and a large number of renditions each month for a four year period. From 2011 to 2015 there were at least ten to twenty renditions of the original pattern each month with their own style of accompaniment such as drums, samples and other synthesized sounds. A collection of two years' worth of music created by the Acid Pattern Group's members is available via the Bandcamp website².

The ability of a globally distributed group of musicians to create such a large number of works within a monthly deadline, and consistently for a number of years can be ascribed to number of factors. Firstly, the acid pattern notation was highly accessible to this diverse group of musicians from around the world and allowed each musician to work on their piece easily. Secondly, the shared cultural

² <https://acidpattern.bandcamp.com>

identity of the musicians around Acid House music [4] brought this group of musicians together and as the group started creating music this brought new members into the group. Finally, the nature of the SoundCloud group allowed this globally distributed group of musicians to become a community which created, shared, collaborated, commented and advised on each other's compositions. As demonstrated in Figure 7, the original track for each month and the renditions would have numerous comments and feedback. In addition the conversational aspect of this system allowed for interactions between each month's pattern creator and those undertaking renditions. These ongoing conversation between members of the group, created networks and formed relationships between this geographically diverse community. This community distributed globally would never meet face to face, they were connected by interest, activity and a shared purpose[6], mediated through SoundCloud, it was a community of the third space bounded by this shared culture and identity [1].

6. CONCLUSIONS

In this paper, it has been demonstrated that the Acid Pattern sheet as an accessible notation system for the creation of Acid House music utilizing the TB-303 and its many clones has been a successful form of notation. The sheet has been used by many individual musicians from around the world since 2010. Whilst the success of the group is not solely attributable to the design of the notation sheet itself, there are also strong cultural, community and identity influences that drive this group. Since the demise of SoundCloud groups functionality, the Acid Pattern Group as continued in somewhat low key form utilizing the Facebook social media platform. The current iteration of the group has 334 members and has been running since 2017, with a fresh pattern and a number of renditions each month.

Whilst the Acid Pattern Group is ongoing, the use of this Acid Pattern sheets as a notation system continues to be utilized by a range of musicians, outside of the group as a way of documenting, archiving, sharing and writing acid house music in their professional practice.

Acknowledgments

The author would like to acknowledge the contribution made by the musicians submitting patterns each month over the course of this project and the musicians that created their own renditions of each month's acid pattern. The author would also like to acknowledge the Roland Corporation for creating the TB303 and Phuture for creating Acid House music.

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