

IM-OS

Improvised Music – Open Scores

Issue 2, Fall 2019

Contents:

<i>Editorial</i> (Carl Bergstrøm-Nielsen)	3
<i>Sounds at Somerset House</i> (Jacob Thompson-Bell)	4
<i>Breathing Instructions</i> (Federico Pozzer)	7
<i>Gestures</i> (Glenn Sogge)	14
<i>Game pieces as games</i> (Adam Izaak Wasążnik)	18
Authors of issue 1 and 2	31

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Editorial

Welcome to our second issue!

Not least thanks to readers' contributions, we present again a diverse selection of graphic scores.- I have loved this diversity of artistic ideas which so clearly radiate from this form of composition since the seventies - each others' good ideas are presented very directly.

In the introduction to a prose notated collection, *Le Temps de le Prendre* from 1997, French composer Jean-Yves Bosseur has stated that our concise and open form of composition could be achieved through cultivating "*the art of notation*" - instead of working out details in a more traditional way. Thus, the work could be perceived "*as a strong organism, with all its potentials*".

Even though open scores are often wonderfully self-explanatory, they are not created in a vacuum. Their study also yields insights into historic roots and sharpen our know-how for the future. Research takes place in both non-academic and academic contexts. The two articles by Adam Wasążnik in this and the subsequent issue stems from his PhD research at the University of Marie Curie-Skłodowska in Lublin. They investigate an aspect of music procedures which may appear so natural but is indeed quite revolutionary: the game one.

Look for yourself - spread the word and remember that further submissions resulting from cultivating the art of notation and having the form of strong organisms with all its potentials are always welcome ;-) The same applies of course to thoughtful texts about them.

CBN

Sounds at Somerset House

Jacob Thompson-Bell

Figures from 'Figures, Grounds And You: A Listener's Guide to Somerset House' (2015)

Over the last five years or so, I have produced a number of graphic scores which aim to transcribe, or visualise, environmental sound in different everyday locations. These transcription scores can be appreciated as visual pieces or interpreted musically. Even though I call them "transcriptions", they are not primarily intended as documentations of sound as a medium. More than this, they are intended to illustrate something of what it *feels* like to be in the spaces and places which have inspired them.

These scores collate poetic observations from visitors and staff as part of my artist residency at the London arts and heritage centre Somerset House (collected via a series of interviews and postcard contributions received during 2014). These observations are each collaged into a short poem, and translated into a miniature text score (labelled 'An Interpretation') and graphic score outlining a musical phrase or gesture.

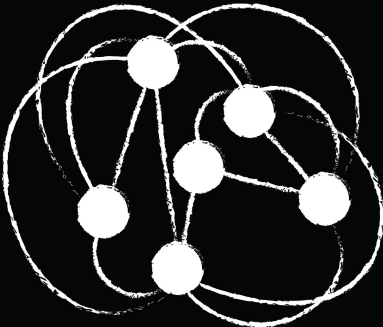
Jacob Thompson-Bell

Sounds at Somerset House (part 1)

Here the sound of water, fountains,
splashes of chatter hitting the hard
stone floor, sounding through the rise
and fall of the fountains, shrieks of
laughter running through the water; till
ringing; a small radio fills a space.

An Interpretation

A hurried fragment,
Bubbling about
Uncontrollably,
Repeated and multiplied into a
Rich, sonorous
Phrase

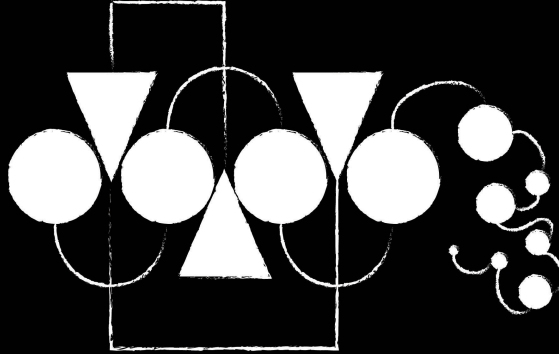


Sounds at Somerset House (part 2)

The wind swirling snatches of conversations in many languages, anonymous chatter, loud, soft; people talking in fleeting tones, the rush of traffic, buses, siren call creeps in; a helicopter overhead, punctuated momentarily by the chiming of the clock, the flight of a pigeon, a ringing phone, a child runs through, alive.

An Interpretation

A subtle continuity,
Broken periodically by
Bright, Open
Chimes:
Strident and loud;
Unexpectedly trailing away in a
Momentary
Flurry of
Notes

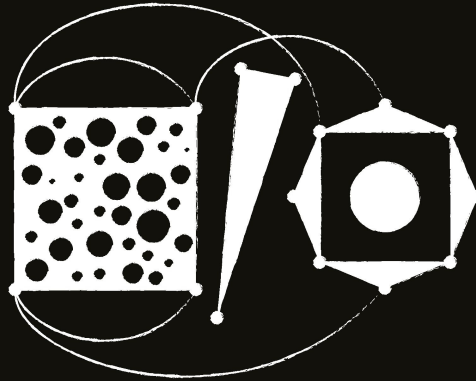


Sounds at Somerset House (part 3)

Contained sound in an open space, or closed within the corridors, footsteps echoing some musical phrase frozen within the architecture; grinding beans, vaporising coffee breezes through, a humming pipe hidden beneath the feet, bottles clinking, the scrape of a teaspoon hitting a cup and saucer.

An Interpretation

Spritely sound,
Trapped and dulled;
Now majestic, melodic,
Static, rhetorical;
A fleeting flavour of something
Different, hidden;
Suddenly stopped in one
Memorable motion



Sounds at Somerset House (part 4)

Creaking floorboards worked by walking feet, chit-chat talking heads, work place security guards bicker, a finger pressing the buttons on a lift going up; down the stairs, people talking unseen.

An Interpretation

Softly, softly;
Sudden spike; a
PING!, going up;
Dropping back down into
Darkness

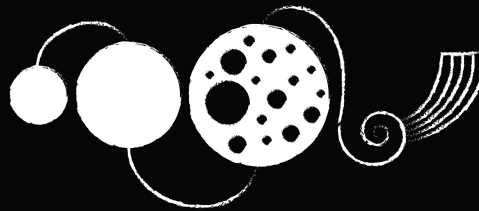


Sounds at Somerset House (part 5)

Thundering, muffled, distant sounds; the loud babble of visitors close quarters, a cackling baby lends another voice, mixed, public noise, serenity; seagulls up high, mice scurrying, clack-clack heels tap the cobbles; my voice.

An Interpretation

Distant sounds
Broaden and swell:
Expressive, playful;
Now sustained, though split
Repeatedly by short staccato;
A brief song



Breathing Instructions

Federico Pozzer

Premise

Three years ago, I started using breathing as time regulator. In my first compositional attempts, breathing was conceived either as a tool to determine the duration of the notes or as a segment of time in which players have to play one or sets of sounds. What interested me in this compositional strategy was the fact that players are brought to play according to a subjective regulator, namely their breath, so that the emerging combinations of sounds between musicians are not under composer's control, but rather they change according to the differences in players' breathings. As composer and pianist, I was mainly fascinated by using breathing patterns with instruments that do not necessarily need breathing to produce sounds; my first pieces shared in fact similarities with works such as *Streichquartett* (1973) by Heinz Holliger and *Found Harmonies* by Malcolm Goldstein (2011), in which string players have to match up-bow and down-bow to their breathing phases, the 2nd and 3rd piece of *Four Meditations for Orchestra* (1996) by Oliveros, in which the duration of notes of unspecified instruments correspond to the length of players' breathing, and *Mind is Moving (I)* by Michael Pisaro (1995), where silences last different amounts of guitarist's breaths. This initial stage of my work was crucial for the compositional practice I am currently undertaking. My recent compositional works are grounded on the employment of explicit instructions that bring players to play and interact in unfamiliar ways, according to constraints on their breathing.

Performance Notes

Breathing Instructions is a series of 25 text scores that aim to push players to behave, interact between each other and engage with their breathing in unpredictable, unfamiliar, and occasionally exaggerated ways. The pieces are open to professional and non-professional musicians, some of them involve the use of musical instruments (when specified), while others require just the use of player's breath. The instructions are flexible, adaptable to a vast range of musical situations and the number of players is open, preferably from 7 to 20 performers.

Constraints imposed by the instructions foster the emergence of circumstances of various kinds, some of them stimulate the intersubjective dimension, engagement between performers, with the audience or with the performance space, others tend to underscore the theatrical aspects of breathing, the possibility of failure, or decision-making processes. It is important to consider that breathing is always used as regulator, namely a tool that coordinates actions, relationships, contingencies and may overturn the situations that usually emerge within a conventional musical context, therefore, the whole temporal dimension of the performance depends on the way players breathe.

In the last page of the document, there is a list of categories that identify a set of key aspects tied to breathing, composition and performance. Categories are in bold, while the pieces are in italics. The way I grouped the pieces within these aforementioned categories may be useful for performers, in order to adopt the most appropriate approach for each piece. All the pieces, except for two, fall into more than one category. However, categories remain open and work just as indicative means, they can easily be mixed, or contradicted by the further experience of the players.

Breathing Instructions

(text scores)

1- Blow I

Breathe. Exhale longer than the other players.

2- Blow II

Breathe. Exhale shorter than the other players.

3- A Bit Longer than Before

Breathe continuously. Every time you breathe, exhale for a bit longer than before. Stop when you cannot handle it anymore.

4- Nose

Take a wind instrument and play C major scale through the nose.

5- Without I

Take a wind instrument and play a C as many times as possible within the same breath.

6- Without II

Take a wind instrument.

Possible choices:

(to be made before starting. Once chosen, do not change)

I- Play a C two times without taking a breath.

III- Play a C three times without taking a breath.

IV- Play a C four times without taking a breath.

V- Play a C five times without taking a breath.

VI- Play a C six times without taking a breath.

VII- Play a C seven times without taking a breath.

etc.

7- Unison Maybe

Perform 5 short breaths in 10 seconds. If you and another player exhale exactly at the same time, start again from the 1st breath. Reactions should be immediate, even if the other does not start from the 1st breath. It does not matter if the other does not start

again from the 1st breath.

8- **Inhalation I**

Take a wind instrument. Play one note but instead of exhaling/blowing, inhale through the mouth.

9- **Inhalation II**

Take a wind instrument. Choose a note and repeat it continuously. Alternate blowing and inhaling through the mouth.

10- **Inhalation III**

Synchronise your breathing with the other players. Inhale louder than the other players, exhale softer than the other players.

11- **Inhalation IV**

Take a wind instrument and play it. When you take a breath, inhale through the nose. Exhale as long as possible. Your inhalation should be longer than your blowing.

12- **From the Soundscape I**

Take a wind instrument. Choose a sequence of 4 notes and play it regularly and slowly. Every time you hear an external sound from the soundscape, start the sequence from the beginning. You can take a breath before starting again, however, remember that the first player to complete the sequence wins.

13- **From the Soundscape II**

Take a wind instrument. Choose a sequence of 4 notes and play it regularly and slowly. Every time you hear an external sound from the soundscape, stop immediately and hold your breath as long as you can. Start again from the point where you stopped only when you hear another sound.

14- **Each Sound**

Take a wind instrument. Choose a sequence of 4 notes and play it regularly and slowly. Hold your breath as long as you can between each note.

15- **You or the Others**

Possible choices:

(to be made before starting. Once chosen, do not change)

I- Breathe normally.

II- Try to match your breathing to another player's breathing without making it clear to him/her. If s/he figures it out, change player. Feel free to move throughout the performance space.

16- **What is '?**

Possible choices:

(to be made before starting. Once chosen, do not change)

Breathe audibly and

I- Hold the breath as long as you can

II- Hold the breath as long as you hear a sound

III- Hold the breath as long as you hear someone breathing

Feel free to move throughout the performance space.

17- **Domino**

Performer 'x' starts inhaling or exhaling. He can choose if s/he wants to inhale or exhale. Performer 'y' next to him/her should do the opposite of what performer 'x' just did. Performer 'z', next to performer 'y', should do the opposite of what performer 'y' just did, etc.

18- **Ratio**

Breathe audibly, following this ratio (count approximately in seconds): Inhaling (4) - Pause (4) - Blow/exhale (6) - Pause (2)

19- **Cough or Sneeze**

Possible choices:

(to be made before starting. Once chosen, do not change)

I- Breathe audibly. If a person from the audience sneezes, hold your breath until someone coughs, then start breathing again. If no one coughs and you cannot hold your breath anymore, leave the stage and breathe in another room.

II- If a person from the audience coughs, hold your breath until someone sneezes, then start breathing again. If no one sneezes and you cannot hold your breath anymore, leave the stage and breathe in another room.

20- **Couples**

Each performer invites a person from the audience to sit close to him/her. The performer should breathe audibly according to the audience's breathing: when the person inhales, the performer inhales. When the person starts exhaling again, the performer starts exhaling.

21- **Breathe or Breathe**

Possible choices:

(to be made before starting. Once chosen, do not change)

I- Breathe audibly.

II- Breathe only if you hear someone else who is breathing. When you breathe once, you have to find another person who is breathing in order to breathe again.

22- **The Stage I**

Two sides of the stage: 'x' and 'y'.

Place yourself on side 'x' of the stage. Inhale while moving to side 'y' of the stage.

Once on side 'y' exhale and then hold your breath. Inhale while moving to side 'x', etc. (Match always the duration of inhalation to the rate of walking)

23- **The Stage II**

Two sides of the stage: 'x' and 'y'.

Place yourself on side 'x' of the stage and take a long breath. Hold your breath while moving to side 'y' of the stage. Once, on side 'y' exhale and then hold your breath.

Hold your breath while moving to side 'x'. Once on side 'x' take a long breath, etc.

(Rate of walking should be determined by your need of air)

24- **The Stage III**

Four sides of the stage: 'x', 'y', 'z', 'q'

Possible choices:

(to be made before starting. Once chosen, do not change)

I- Perform '22-The stage I' from side 'x' to side 'y'

II- Perform '22-The stage I' from side 'z' to side 'q'

25- **The Stage IV**

Four sides of the stage: 'x', 'y', 'z', 'q'

Four corners of the room: 'a', 'b', 'c', 'd'

Possible choices:

(to be made before starting. Once chosen, do not change)

I- Perform '23-The stage II' from side 'x' to side 'y'

II- Perform '23-The stage II' from side 'z' to side 'q'

III- Perform '23-The stage II' from corner 'a' to corner 'b'

IV- Perform '23-The stage II' from corner 'c' to corner 'd'

Categories

1- TIMING (instructions may indicate for how long the piece should last, the extent of the repetition of the occurrence of an event, and/or the physical aspects that can determine the duration of the musical event)

Blow I; Blow II; A Bit Longer than Before; Without I; Without II; Unison Maybe; Inhalation II; Inhalation III; Inhalation IV; From the Soundscape I; From the Soundscape II; Each Sound; You or the Others; What is '?; Domino; Ratio; Cough or Sneeze; Couples; Breathe or Breathe; The Stage I; The Stage II; The Stage III; The Stage IV

2- COMPETITION (players are brought almost to compete with each other. Physical effort and stamina involved in players' actions are due to the way the other participants breathe)

Blow I; Blow II; Inhalation III

3- RECIPROCAL LISTENING (players are pushed to interact with each other)

Blow I; Blow II; Unison Maybe; Inhalation III, Domino

4- ONE-DIRECTIONAL LISTENING (relationship that takes place between two participants, but just one person is involved in the act of listening)

You or the Others; Couples; Breathe or Breathe

5- INTERACTION WITH THE ENVIRONMENT / AUDIENCE (relationships that take place between participants and the environment or the audience)

From the Soundscape I; From the Soundscape II; What is '?; Cough or Sneeze; Couples

6- CHOICES TO BE MADE BEFORE THE BEGINNING (participants have a set of options and they have to decide before the beginning which one they should perform. Decisions can be made freely according to the will to fulfil the required task or the physical limits of the player)

Without II; You or the Others; What is '?.; Breathe or Breathe; The Stage III; The Stage IV

7- PERFORMANCE SPACE (the performance space affects some aspects of the piece)

Cough or Sneeze; The Stage I; The Stage II; The Stage III; The Stage IV

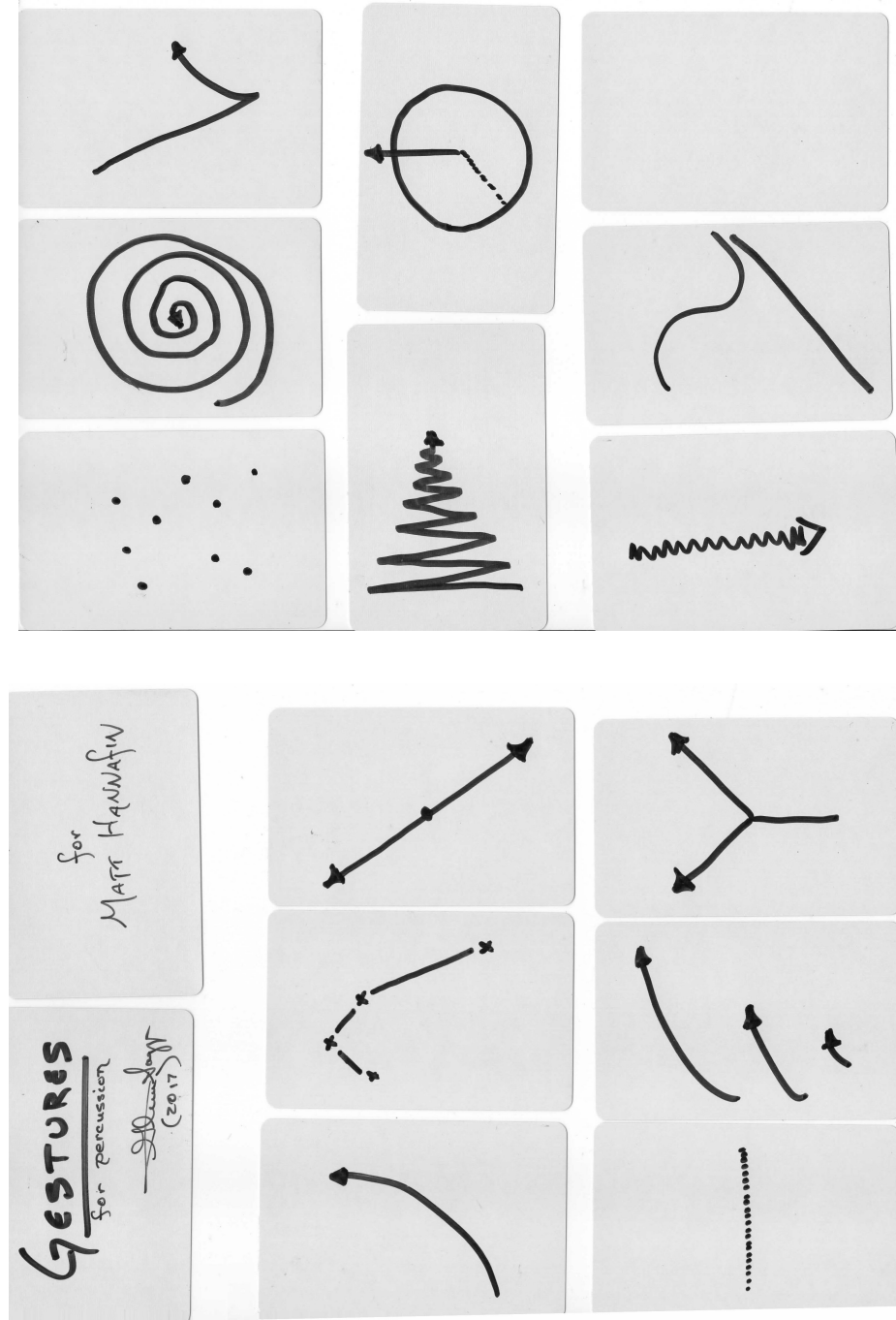
8- FAILURE (fulfillment of the constraints is objectively not possible. The task cannot be completely achieved, if not in the attempt to perform it)

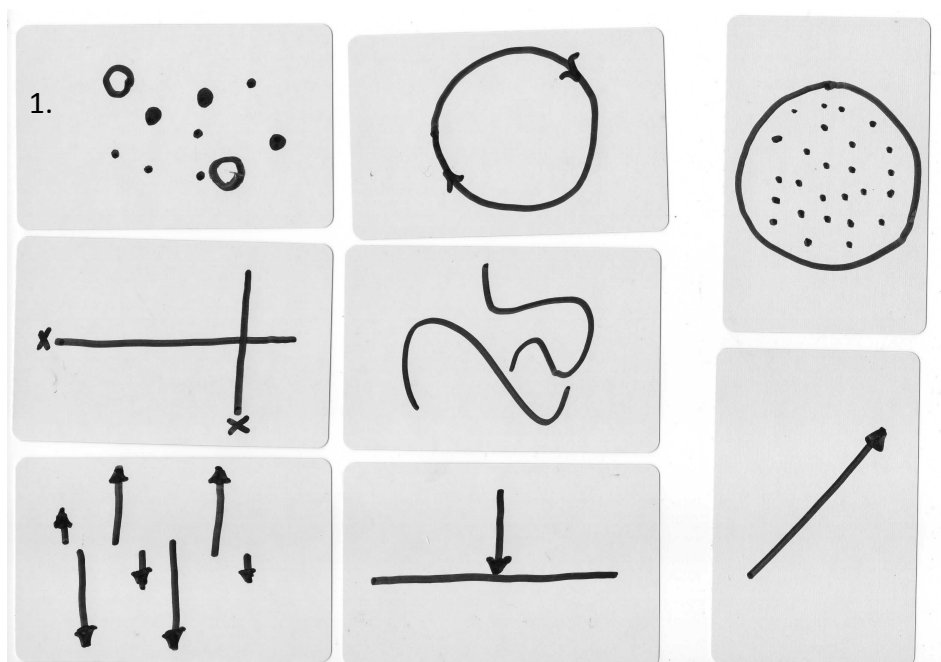
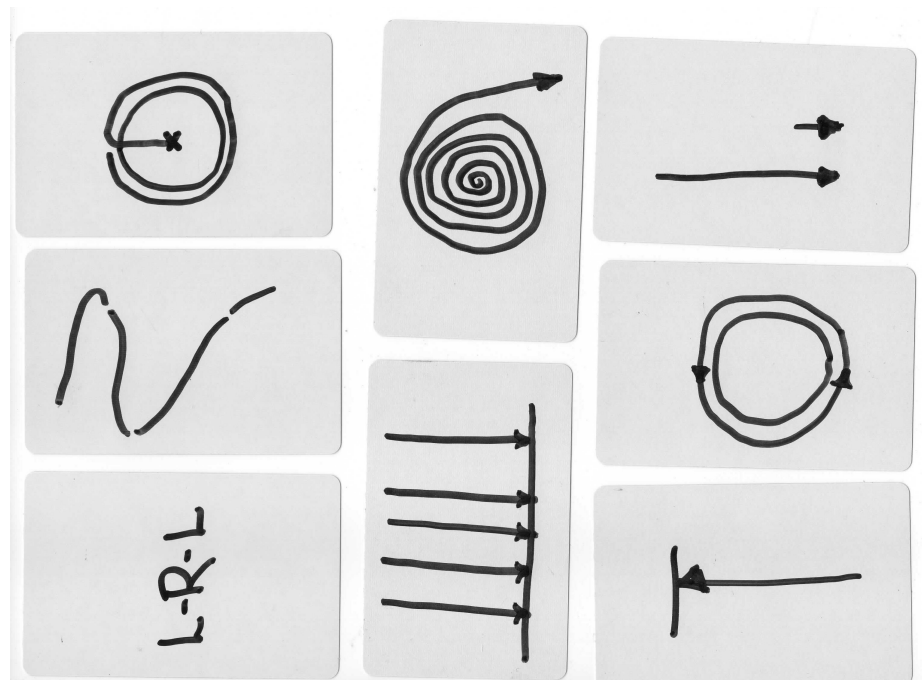
Blow I; Blow II; Inhalation I; Nose

Glenn Sogge: Gestures for one or more percussionists (2017)

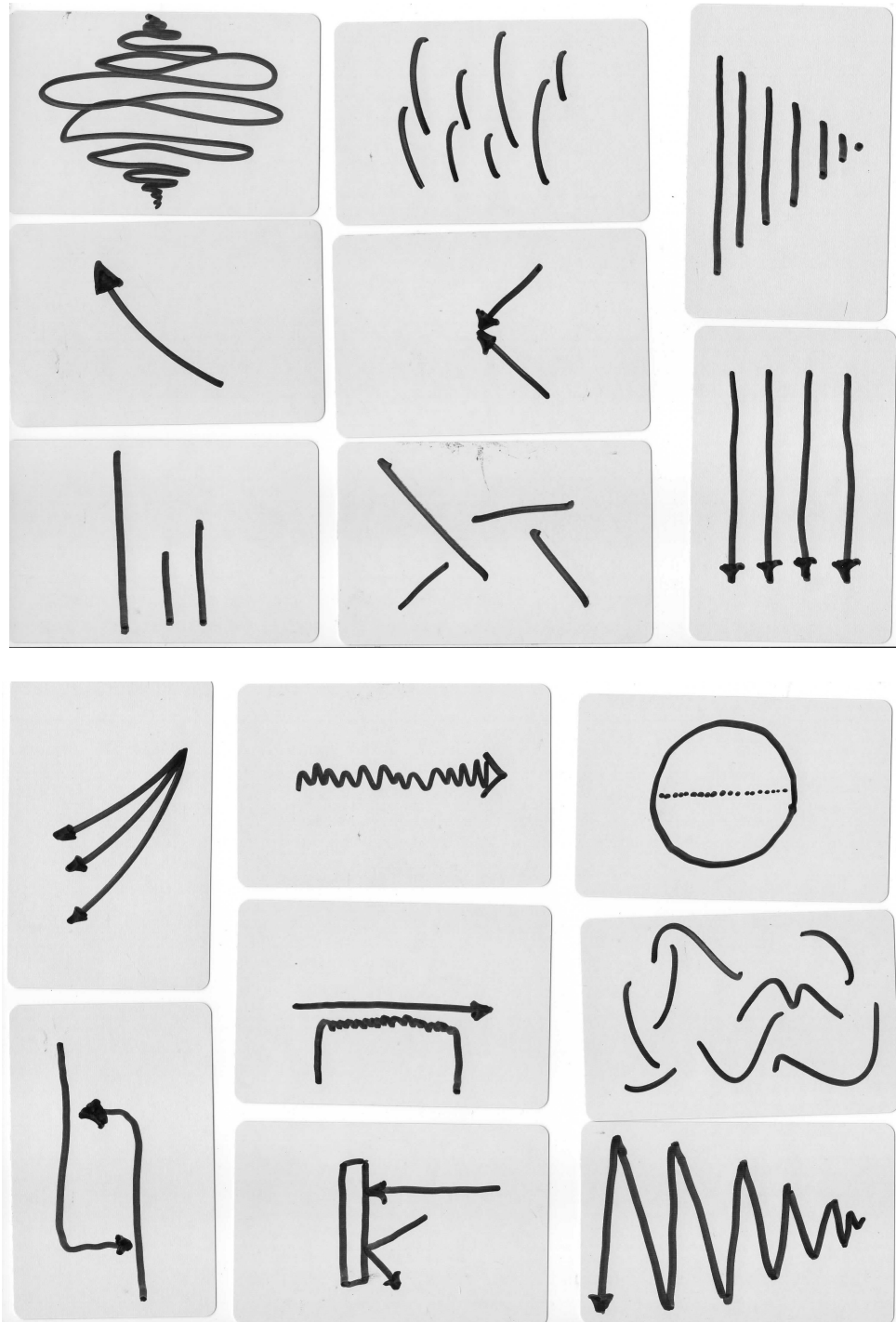
The score was originally written on a deck of standard size blank playing cards. The performer(s) should prepare an arrangement of the cards, considering both space on the paper and orientation of each card. All cards need not be in use for one performance.

Arranging does not necessarily mean fixing a sequence.

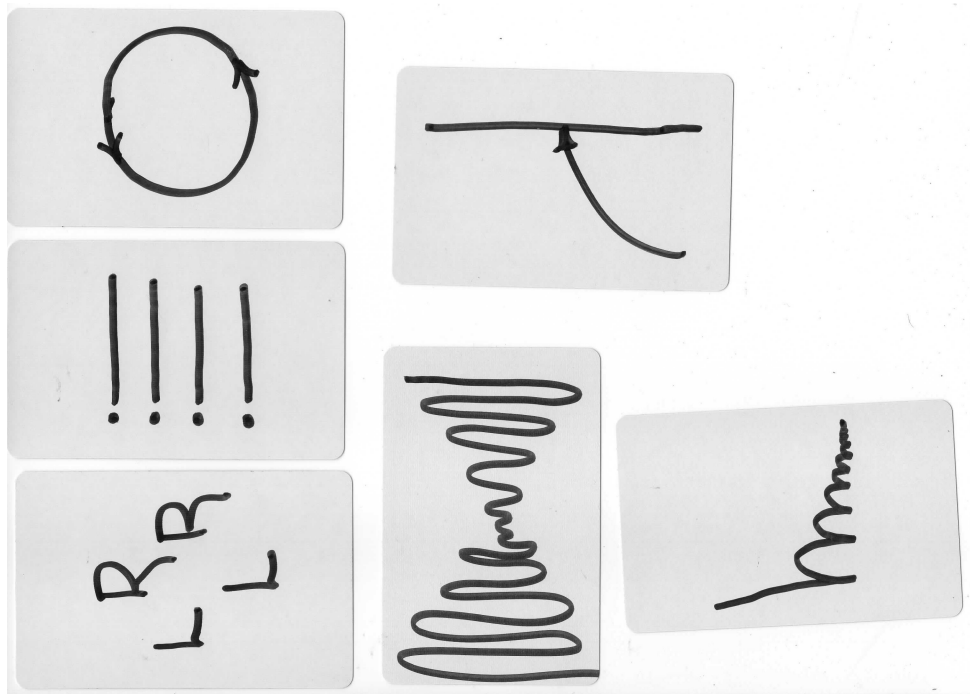




Sogge: Gestures p.2



Sogge: Gestures p.3



Sogge: Gestures p.4

The following article examines the relation between playing games and music. It was written on the background of PhD studies at the University of Marie Curie-Skłodowska in Lublin.

Board games as well as sports games seem a very old invention, yet their forms have changed through history. Within experimental music, composers like Xenakis, Chr. Wolff and John Zorn have worked with the notion of game, and from the eighties the idea of "game pieces" became well-known. From a musician's perspective it could also seem natural to compare music-making with a game – even free improvisation. It's a collaboration, there are both risks and chances of reward...

So, what is the defining characteristics of game, asks the author. According to some game scholars, winning and losing is not decisive, rather to have a play activity and to pay attention to an outcome, a bottom line as it were – which does not have to be quantifiable, like when earning points. The fact that games exist for even a single player also demonstrates that the competition element is not decisive. Turning to comparing gaming and music situations, it seems characteristic that gaming focuses on participants while music are targeting audiences. But is this difference really so absolute – are not professional sports people performers, and are not music audiences participating in the process, one could ask.

The article further presents concepts from game studies. Traditional music theory has often focused on sounding material (like scales and chords). But here, the process is in the foreground: 'Flow ' deals with the quality of the overall process, and 'Players' Story' deals with how the individual player experiences it – 'Game State' as well as 'Mechanics' is about form and structure, and 'Balance' has something to do with keeping arising situations fresh, keeping possibilities and options open. Some of these concepts could obviously be challenging ideas for composers! A practical example at the end sums up the article so far. Part 2 that follows in our next issue will look more closely at music games and their balance.

CBN

Game pieces as games – part 1

by Adam Wasążnik

In this text I'd like to take our dear readers to a specific area of open scores: game pieces. These scores are written in natural language and provide a set of rules for performers to follow. As was mentioned in the first issue (Bergstrøm-Nielsen 2019: 9), the distinguishing factor for such pieces is a non-predetermined sequence of events which instead emerges from interactions between players or between players and objects.

The approach taken in this article will not be musicological but interdisciplinary. As codified rules and unknown outcome are key aspects of actual games themselves, we will treat game pieces here as a sub-type of games that result in music (hence we will use the term “music games” as a synonym). Both game-related scholarship and game design field of expertise will be relevant for this text.

The following chapter will briefly present the game related thought in its historical context emphasising 20th century advancements. The next section will provide a basic comparison for games and music in order to establish limits of the presented method. Then we will explain some game design concepts that should be especially suited to game pieces and by the end of the text we will hopefully present the usefulness of this approach to music games and topics for further discussion.

The text is intended as a “technical report” that introduces a supposedly novel approach to an area of experimental music. In contrast with the usual style of this genre, next chapter will be illustrated to provide additional reference for readers not familiarised with games and their history.

Game developments

While games are with us for at least 5000 years, the general thought about games is quite new. This situation is akin to music, as here the scholarship was for the most part also narrowed down to a specific musical heritage. Islands of gaming culture were most notably gathered around Chess in the West and Go (baduk, weiqi) in the East. Strategies are not the only fruit of such cultures, also art and historiography.



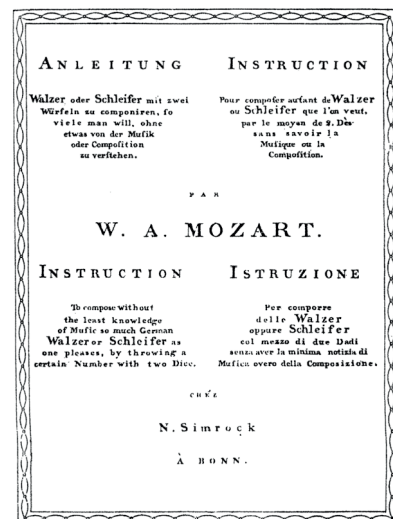
Written history didn't cover the very beginnings of the game, leaving that to myth. The rules of the rich classical games that we know today evolved through long periods of time, being improved by collectives of players. Games with standard playing cards (first mentioned in the 14th century) can provide some exception to this evolutionary process, because they regularly spurred individual creative efforts even if the origins of shared mechanics like hand, deck or shuffling are unknown.

Cribbage (1530) which mixes playing cards with board and pawns is one of the earliest examples of games with a known designer. Nevertheless the knowledge about games creation didn't yet start to accumulate.

Historically, on a general level thinkers more often analysed the playing and playfulness itself than games. Coincidentally around the time of *Musikalisches Würfelspiel* (musical dice game) popularity in the 18th century, Friedrich Schiller (writer of *Ode to Joy*) put milestones along this line of thought with his Play Drive theory (*). The theory itself deals with the existential and ethics, but on his way Schiller makes interesting remarks, for example finding the essence of play in the balance between constraints and possibilities.

Let's move ahead in this short historical overview and focus on two events from just before the II WW. In 1933 Johan Huizinga lectured on the limits of play in culture. Later his book *Homo Ludens. A Study of the Play Element in Culture* (1938) elevates play to importance unseen before in scholarly publications.

Being rather about play than games (although it's worth noting that Huizinga's Dutch like many other languages doesn't distinguish both terms that clearly) it considers playing as a source of all culture (yes). Huizinga inspects in depth also the relation between playing and music with references from Aristotle and Plato and examples from different cultures.

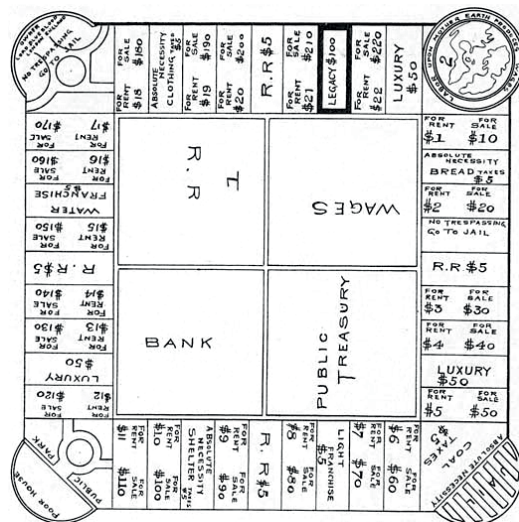


Secondly, in 1935 *Monopoly* was published. It was derived from educational *Landlord's Game* from 1906. *Monopoly*, although, by standards, not so well designed, is a very popular format that was purposefully developed to generate engaging, dramatic stories. It has a great player base in different age groups and legacy of many followers.

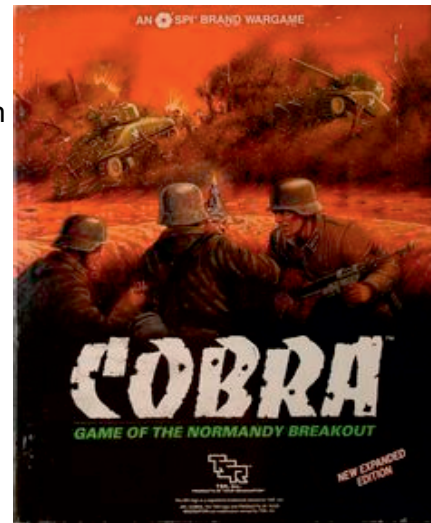
Just after the war John von Neumann developed his *game theory*. It deserves a paragraph as an inspiration for Iannis Xenakis and his formalized approach to games in music. Despite its mathematical richness game theory is not a very useful tool in game design.

This period was the golden age for game pieces, but board games gained popularity slowly. First came the wargames with their numerous components and long rulebooks. What was celebrated by both makers and recipients of this genre was accuracy of simulation.

Later, when game creators started targeting wider audiences, focus changed. Having freedom with the theme and noticing that (as in classical games) great complexity may emerge from relatively few simple rules, game designers started developing techniques to achieve the new design ideal: “easy to learn, hard to master”. This direction in board game design was pioneered in the 60’s, the trend gathered pace around the 70’s (especially in Germany), but widespread following came yet later.



Music games were not involved in this movement back then and the asynchrony between music and games development in that regard is impactful. John Zorn's *Cobra* is a game piece from 1984 directly inspired by an earlier Normandy-themed wargame (1977, 1984 – box).



With predecessors as these, the game is complicated. Is that necessary? That's a hard call because complication can serve many different purposes, but maybe part of it directly results from what games on the American market mostly were back then. Interestingly *Cobra* the board game was praised for its simplicity of rules.

TERRAIN KEY											
Clear	Light Forest	Heavy Forest	Hills	Major City	Minor City	Major Road	Minor Road	Bocage Area	Sea	Major River	Minor River
TERRAIN TYPE	MOVEMENT POINT COST to Enter Hex or Cross Hexside Non-Mech/Mech		CRT COLUMN SHIFTS LEFT When Defender Is in or behind Terrain								
Clear	1 MP		none								
Light Forest	1 MP/2 MP		none								
Clear Bocage or Light Forest Bocage	2 MP		1 column								
Heavy Forest or Hills	2 MP/4 MP		2 column								
Town	Other		1 column								
City	Other		2 column								
Minor Road	1 MP		Other								
Major Road	½ MP		Other								
Minor River	+ 1 MP/+ 2 MP		1 column								
Major River	+ 2 MP/+ 4 MP		2 column								

COMBAT RESULTS TABLE											
Combat Ratios (Attacking Strength to Defending Strength)											
ATTACKER	1-5	1-4	1-3	1-2	1-1	2-1	3-1	4-1	5-1	6-1	DEFENDER
1	1/-	1/-	1/1	1/1	-1/1	-1/1	1/2	-2/2	-2/2	-2/2	1
2	2/-	1/-	1/-	1/1	1/1	-1/1	-1/1	1/2	-2/2	-2/2	2
3	2/-	2/-	1/-	1/-	1/1	1/1	-1/1	-1/1	1/2	-2/2	3
4	3/-	2/-	2/-	1/-	1/-	1/1	1/1	-1/1	1/2	-2/2	4
5	4/-	3/-	2/-	2/-	1/-	1/-	1/1	1/1	-1/1	-1/1	5
6	e/-	e/-	e/-	2/-	2/-	1/-	1/-	1/1	1/1	1/1	6

SEQUENCE OF PLAY											
A. German Player-Turn											
1. Weather Determination											
2. Replacement Phase											
3. Initial Movement Phase											
4. Combat Phase											
5. Mechanized Movement Phase											
B. Allied Player-Turn											
1. Weather Determination											
2. Supply Phase											
3. Replacement Phase											
4. Initial Movement Phase											
5. Combat Phase											
6. Mechanized Movement Phase											
C. Game-Turn Indication											

Cobra											
Game-Turn	1	2	3	4	5	6	7	8	9	10	11
US Command Level/Supply Pts	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3
Br Command Level/Supply Pts	5/3	5/3	5/3	5/3	5/3	5/3	5/3	5/3	5/3	5/3	5/3
Allied Reinforcements	US	US	US	US	US	US	US	US	US	US	US
German Reinforcements	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge

In academy, Roger Caillois developed Huizinga's thought (1957*), but *game studies* (that is a proposed name for the field) accelerated rapidly some time after the advent of computer games. To be sure, for the purpose of making our insights into music games, knowledge in digital media is not necessary. Nevertheless, the technological change greatly influenced the general theory, for example by leading to much diversity in gameplay as computer games eventually led us far away from "one winner, one loser" model of classical board games.

Confusingly for nomenclature, digital “music games” (sometimes as “rhythm games”) is a genre where playing is done in strong connection with music e.g. synchronising actions to rhythm or reacting to aural cues. These, and video game music in general, are of interest to one area of games scholarship – ludomusicology. As it is most often illustrative to actions of players game music is itself open in diverse aspects. Live performances of this music are done usually as set compositions, but some open ones happen too. For example during the e-sport tournament finals (The International 2016), during the first slow phase of the game, the ensemble was playing live, adjusting to the progress of the playthrough.

Buffed narrative aspect in the digital realm resulted in involvement of film, theatre and literature theory in the analysis of games (Murray 1996), which gave quite a pace to the scholarly discourse. The ludological option of game scholarship that resulted from following methodological disputes (Frasca 1999) focuses on gameplay and the relation between player and the game (not so much on narratives). This approach is used both for digital games and for abstract board games, so it proves the most useful for analysing music.

On music and games

Inevitably, game studies introduced many terms and categories. Interestingly, one of the prominent ludologists noted that games, contrary to the understanding established in experimental music, might be based on a predetermined sequence of events (games of progression vs games of emergence; Juul 2005: 72). Linearly structured games of progression might be realised as video games, role-playing games or board games.

However, one of the first main endeavours of game scholarship was to come up with acceptable definitions of games. This task was already considered problematic (Wittgenstein 1953*). We can here refer to Jesper Juul’s exemplary definition that states: *A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable* (Juul 2005: 36).

The only aspect of the above description that we cannot apply to a music game is (usually) the quantifiability of the outcome. It’s related to the famed “winning-losing” factor of games (in their usual forms) that is absent in music. But results are the focus of players not game designers who operate on a different level and with different categories. As Brian Upton puts it: “Instead of treating conflict and

interaction as essential to play, we can treat them merely as medium-specific techniques for generating interesting horizons of intent. This means that we can use the heuristics of play as a critical tool for understanding how art in general goes about structuring experience.” (Upton 2015: 112)

Technically, in game studies we say that single-player or cooperative games are “ergodic” (Aarseth 1997) not competitive, because the effort is required and on the other hand there is no actual competition against any opponent. According to many game scholars winning and losing is essentially not important even if it is important psychologically for players. If we still tend to treat competition as an important difference of considered fields, let’s notice that latin word *concertare* means “skirmish, argue, contend”. This etymologically might be incidental, but still fits well to concertos (for soloing instruments) that were often intended as a display of skill.

Another, probably much more important, difference between games and music is the intended group of recipients of the work. In the hall there is an audience and they are considered the final target. But games are made for players themselves with relatively rare (although culturally important) exception of spectator sports (here also some “mind sports”).

But is having the audience the essential aspect of music, or is it maybe a specifically Western customary social context for its usage? Sometimes it’s considered much more important to sing or play than to listen. Even staying in the context of the West (as the area most familiar to the author) we can point to etudes, church or celebratory songs or even to some extent all of chamber music in the classical era which was quite often used in such a casual way (even being dubbed “music of friends”).

Useful terms

Now we will present a few of the terms that are commonly used in game design. As it is relatively new and not an overly theoretical field, for some definitions there might be no general consensus yet. First two terms focus on a player’s experience and second two are technical and help to conceptualize the game and work on its details. The last one – balance – is a very deep notion that can inspire volumes on its own (at least it inspires in me).

Sections related to every term (other than balance) will take a three-fold form: explanation of the term, setting the context for music games and an application. Example target for that application is provided by the music game “Into the Labyrinth” that is included as an entry in this issue of *Improvise Music - Open Scores*.

Flow

This term appears in two meanings that are quite distantly related. First, **flow state** is a state of mind (known as being “in the zone” or “hyperfocus”) which was described in psychology by Mihály Csíkszentmihályi in 1975. For many designers causing this state in players is the main aim. You can achieve it by adjusting the challenges of the game (players should always stay on a line between boredom and frustration) and making sure there is a proper **flow of the game** (the second meaning). You care for game flow mostly by removing obstacles to it and potential disruptions might take many forms affecting the ergonomics, players’ attention or going against habits.

Many times you can imagine setting the rules for your game in two versions that result in the same social dynamics, possible actions and strategies or the same range of theoretically available musical results, but one with better flow than the other. Inspect the elements that might seem small: the order of actions required, the way of presenting things on game components, the amount of coherence put into naming of the elements etc. You can not only expect better player experience with a better flow, but probably the musical result will be better if you allow players to focus more on making music than on administering a game.

Design choices that were intended as improvements to the flow in “Into the Labyrinth” game are mostly regarding the DM role (DM stands here for Drumming Musician but it is also a common abbreviation for Dungeon Master in role-playing games). The directions in the maze/labyrinth drawn by the DM for the game and meaning of signals from other players are to be intuitively connected for fast association. There is up/down both in pitch and on a piece of paper. The fact that in-maze “right” is closer to “speeding up” signal is connected to the fact that as we read from left to right, this is a natural direction of movement. For playing the game where script direction is different it’s worth considering swapping the direction, but all in all testing would be required to show which way is better for the flow.

Player’s story

This term has more than one meaning too, but we will focus just on one (experiential emergent narrative; Pearce 2004: 145). During the playthrough of the game there is a sequence of events that often takes a very dramatic structure. This story follows the adventures of each player and it’s up to a designer to provide an interesting story for each, and quite a lot of them as every playthrough should lead to a different story.

Considering the player's story it's worth remembering that the more distinct possibilities you provide the better. It's important for players to be able to play the way they prefer as players express their personalities through player's stories they create, which might go in parallel to music they play in the game.

Maze structure generates stories by itself, but its size and number of potential dead ends makes the resultant stories much different. With "Into the Labyrinth" player's stories change very much with growth in the number of players to a point that throughout the game you might happen to be a passive improviser with no influence over the gaming result. We need to take care of the balance between game aspect and music aspect and if game aspect was the only focus, the number of players would be narrowed down to avoid unsatisfactory player's stories.

Game state

On the other side from social aspects and subjective views we can look at games as systems. Contrary to many kinds of plays, games can usually be formalized in a way that lets you describe precisely the exact situation and follow the changes in the game. You can think of it as a set of variables that can take different values. Game state might be influenced by players, by random events or by algorithms based on time. In chess for example basic game state informs us what piece (or empty space) is at each of 64 fields of the chessboard and for full game state you need to add a few bits of information regarding previous situation in the game (to model detailed chess rules regarding castling (king and rook exchange), repetition of moves or en passant capture).

When designing or analysing the game piece, it's state is rarely related directly to music. We often have distinct layers where musical one is much more continuous and hard to interpret as a game state. Also in the broad scope of music games the term doesn't always apply because some game pieces are very loosely defined. For a music game designer there is a lot of thought to put in the relation between the game state and the music played.

Into the Labyrinth has a game state that is not known to the same extent to different players, but all should be able to recreate it with effort. Almost all of the game state is tracked at DM's piece of paper where he draws the maze and the progress of the game. Game state here includes the placement of walls and the current location of players as well as walls that were already hit. One more aspect of the game state is the transition: is it on? who does it? in what direction? Answers to these questions might also be tracked by the game state.

Mechanics

Parts of game rules might be grouped by function to form sub-systems, most often serving as ways to interact with a game state. Usually more than one mechanic is incorporated into a game, although having many of them is avoided, because it causes player's confusion and by itself doesn't make the game better.

Mechanics are usually shared between many games, and actually using well-known mechanics is good for the flow of the game (as players act more naturally). Surely, designers try to invent new mechanics and may even get famous for it, but if the mechanics works well it will surely be used in more games to come, joining the designers' arsenal in their projects.

One of the more common mechanics present in *Into the Labyrinth* is its space. The adjacency of places and traversability is a very useful and often almost transparent game solution both for creators and players. Transparency means that it doesn't interrupt the flow.

Balance

Game is in balance where it doesn't tend to a single scenario. This is a working definition that I prefer, placed between the most used narrow meaning that relates only to winning and a much wider understanding that gets close to a general, non-technical metaphor. There will be much more to say about balance, some remarks can be found in the following chapter but more will need to wait for another article.

Try the games

We established earlier in "Games and Music" chapter, that music may be about the experience of the performer and when that occurs, music and games are strikingly similar. But a situation when author ("designer"/"composer"/"concept provider") writes music "for" performers is more an exception than the rule. Are there any more important connections between games and music to be drawn? Is applying the game lens to music justified?

It might be clear now that in the educational context, music games are a valuable tool, present already in many forms. In jazz Peter Erskine features often his Comping Game and Chick Corea showcases game about symmetrical playing. For free improvisation workshops where game pieces are also often used, applying more design knowledge may improve the effectiveness of this method.

On a more general level though, when the creator of a game envisions some dynamics of the game and intends to introduce it by setting up the game rules, this complex interrelation has to take into account diverse motivations and ideas of players. To actually confirm that a deep concept of a game is realised, games are usually thoroughly tested. This process leads to gradual elimination of all unintended and unwanted side-effects of freedom and creativity of players (and may lead to discovery of unintended and wanted ones). After all, a broad structure appears that is both complex and balanced.

I would like to suggest that qualities of this structure that are looked for in games are close to qualities often appreciated in music and I hope to gather evidence for that fact in the second part of this series of articles where the notion of balance will be investigated more closely in the context of music games. Considering that the term “game balance” is clearly a metaphor, we can establish a base for that comparison in cognitive metaphor theory where the analysis of balance schema have already been classically used in relation to works of art (Johnson 1987: 80-85). I hope it will contribute to development and research of music games.

Images

Japanese women playing go, Kikugawa Toshinobu, 1811

Cribbage: Puginil, “Cribbage board”, CC BY-SA 4.0

Front page of musical dice game attributed to Mozart

Landlord’s Game by Lizzie Maggie, image from a patent

The Battle of Britain game box cover (1961)

Hare and Tortoise game (first published in 1974)

Cobra, board game box cover of 1984 edition

Cobra, summary of rules (<http://boardgamegeek.com>)

Notes

Some of the remarks above I also wrote down earlier in a lighter and disperse form at <http://musicgames.wikidot.com> – wiki and open library of game pieces.

(*) Classical sources for the above text I read in my native Polish, for the purpose of this article it seemed unproductive to provide exact references to such translations. If you want to track down paragraphs in your edition of the text and for any other discussion please contact freely at adam.wasaznik@gmail.com

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Into the Labyrinth

by Adam Wasążnik

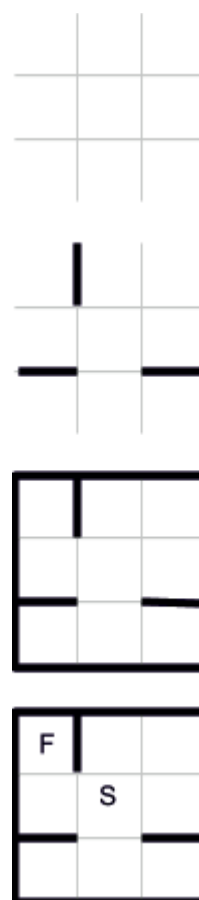
For 1-9 pitched instruments and 1 percussion.

Drumming Musician (DM) will need pen and paper and will be seated in front of other players, hiding his *maze* from view. All other players sit in a semicircle in front of the DM.

Preparation

DM draws thinly a tic-tac-toe mesh (see illustrations to the right) and chooses freely 3 of all drawn 12 line segments. Chosen segments should be thickened on a drawing. Then larger thick square will be drawn closely around the mesh and a maze will be formed where thick lines are *walls* and thin lines allow *passage*.

DM marks the starting and ending locations in the maze. For a first, warm up game, let starting location (S) be in the middle and in any case the ending location (F) shall not be walled off of the starting location (there should be direct or indirect passage). The *maze* is now drawn



How to play

Repeated turns follow until the end of the game:

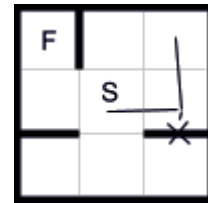
1. DM points to a player (chosen freely)
2. Chosen player performs a *transition* which might be
 1. slowing down (West)
 2. speeding up (East)
 3. going higher with pitch (North), or
 4. going lower with pitch (South)
3. DM gives feedback.

Ad 3. If DM didn't recognize the *transition* played by the player, turn ends and DM chooses another player; otherwise DM signals the result of movement with the short percussive fill-in and marks the change on the chart.

If in the direction signalled by the player (N, E, S, W) there is a **wall**, DM plays a dramatic, louder fill-in then marks a wall that was just hit in the *maze* and the turn ends.

If in the direction signalled by the player there is a **passage**, DM plays a soft, delicate fill-in then marks a line to establish the next position of players. Then the turn ends.

Example markings after 4 turns (to the right). DM didn't recognize the *transition* once (unmarked) and there was one wall hit and two passages. *Transitions* went: speeding up, go lower with pitch, go higher with pitch.



End of the game

Game ends when players arrive at the ending location (success) or if they hit the same wall twice. DM should signal those facts by playing triumphantly or depressingly/disruptively for an extended period of time.

Musical suggestions

During the *transition* other players should relate musically as they see fit to what is being played by the signalling player.

At the end DM plays in a relatively unchanging fashion, when this is noticed, other players should proceed to end their parts. DM ends the piece.

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