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Rashkolnikow -

an electro-acoustic interpretation of a classic novel

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1. Abstract

English:

The following diploma thesis comprises composition designs and performance guidelines as well as the written dramaturgical concept for a new theater piece based on Fjodor Michailowitsch Dostoyevski's novel *Crime and Punishment*. As part of a collaboration, the stage and costume designs for this piece have been prepared by former KUG student Rosa Wallbrecher, who submitted her portion of the project in her 2015 presentation of her thesis. The research portion of this work offers insights into Radio Plays as a genre and Dostojevski's biography as well as a short summary of the novel plot. Furthermore, towards the end of this work I suggest possibilities for future performances as well as uses of the research into Radio Plays in works to come.

Deutsch:

Die folgende Diplomarbeit umfasst Kompositionsentwürfe und Leistungsrichtlinien sowie das schriftliche Dramaturgische Konzept für ein neues Theaterstück auf der Grundlage von Fjodor Michailowitsch Dostojewskis Roman *Schuld und Sühne*. Im Rahmen einer Zusammenarbeit wurden die Bühnen- und Kostümentwürfe für dieses Stück vom ehemaligen KUG-Student Rosa Wallbrecher vorbereitet, der ihren Teil des Projekts in ihrer Präsentation ihrer Diplomarbeit vorgestellt hat. Der Forschungsbereich dieser Arbeit bietet Einblicke in Radio Plays als Genre und Dostojewskis Biographie sowie eine kurze Zusammenfassung des neuartigen Handlungsplans. Darüber hinaus schlage ich bis zum Ende dieser Arbeit Möglichkeiten für zukünftige Aufführungen sowie die Nutzung der Radio-Play-Spiele in den kommenden Werken vor.

2. Introduction

This thesis attempts to show how a classic novel by a famous Russian author can be newly interpreted using modern computer music techniques, a fresh approach to sound design, and immersive set design. The piece uses multi-media, expressive set design, inspiration from radio *hörspiele* (or radio plays), tape elements, live sound processing, and minimized dialogue. The new theater piece, entitled *Rashkolnikow*, is a team project in collaboration with the set designer, Rosa Wallbrecher who presented her initial set concepts during her master's presentation in the winter of 2014. The piece is an interpretation of the classic Dostoyevsky novel, *Crime and Punishment*. After months of discussion and development, a design was developed that highlights some of the most important themes present in the novel while at the same time determining a design aesthetic that favors minimalism and dark palettes over complexity and color.

The sound, in concurrence with the set design, also maintains a darker, simplified texture and is not intended to overstate the intentions of the set. The objective of the music /sound design is to utilize fundamental elements pioneered in radio plays as musical inspiration and give the audience a contrasting perspective on the mind of the main character, Rashkolnikow. As a member of the audience, these perspectives are embodied through the feeling of both viewing Rashkolnikow from his own mind as he gradually sinks into his own world and as that of of an unattached observer for whom reality is in a normal flow or time frame.

These contrasting viewpoints are achieved through the use of sound design, sound specialization, radio-play inspired voicings or spoken acting, and on-stage vs. recorded character acting. For the main themes of the play we have extracted from the book as well as other sources research into its dominant, sub-textual themes of hubris, self-perceived greatness, and the nature of struggle. Much like the novel itself, the play will exhibit a both visually and aurally muted quality with the noticeable absence of humor, wit, and lightheartedness. Instead abstraction, blandness, and a hint of the insanity are preferential.

3. Crime and Punishment

The novel by Fjodor Dostoyevsky centers around a young man by the name of Rashkolnikow who spends most of his days laying about his tiny Saint Petersburg apartment in an almost dream-like state. Despite having friends and acquaintances who attempt to "awaken" him, Rashkolnikow remains ever lost in his own mind. It is in the depths of his mind that he devises a plan to murder an elderly money-lender, Alyona Ivanovna, to whom he owes a great sum of money with the motivation for such a murder being a greater force outside of himself. Eventually, he carries out the murder which he previously deemed would be perfect but despite this manages to bungle key elements of it. For example, not only did he murder the money-lender Alyona, but also her sister who he wasn't expecting to be in the flat at the time. Also, He managed to get blood on his clothing and in his haste forget to steal the planned valuables from the apartment. It was only through luck that he was not discovered leaving the apartment in the first place after fleeing the murder scene. Finally, managing to return to his apartment, Raskolnikov falls into a feverish state, obsessively worrying over the murder. With the stolen items, the little which he managed to take from the scene, he hides under a rock, and tries desperately to clean his clothing of any blood. Even after awakening from the delirium, he suffers from chronic over-excitement and becomes more and more involved in risky conversations with the investigator Porfiriy Petrovich, who soon recognizes the murderer in Raskolnikov. The murder, however, turns out to be a perfect crime. Burdened by the accusation, a separate man even makes a false confession so that Raskolnikow alone is left to deal with the consequences of his crime.

With his head full of confused, paranoid, and hate-filled thoughts, he drifts through the streets, and lands by chance on the doorstep of his former colleague, Rasumichin. He has no idea of Raskolnikov's deed, is shocked at his appearance, and offers him assistance. Raskolnikov eventually overcomes his anger at himself and everything around him, and leaves the apartment in a fury.

Raskolnikov's sister Dunja and mother Pulcherija Alexandrovna arrive in Saint Petersburg. They report their intention to marry Dunja with the rich court councilor Pyotr Petrovich Luzhin, which would improve the financial situation of the family. Raskolnikov understands the marriage as the sacrifice of his sister for his sake, and draws parallels to the fate of Sonja Marmeladovna, the daughter of a former officer and drunkard whom Raskolnikov had met before his deed. She became a prostitute in order to support her family after her father had lost his position as an official, and her mother had fallen ill. When Raskolnikov witnessed the death of drinker Marmeladov with his own eyes, he decided to help the family in order to regain his lost humanity.

In the end it is Sonja, who saves Raskolnikow. In three conversations she penetrates all the arguments with her rejection of every argument and with the knowledge of a lingering soul inside of Raskolnikov. She finally convinces Raskolnikov and advises him to show himself to be the murderer. At the end of the novel, there seem to be only two ways out of his torment for Raskolnikov: the final exit from life through suicide or the return to society through a confession. Up to the last page in the sixth part Raskolnikov cannot clearly decide for either of the ways. Twice he walks up the stairs to the police station before finally confessing.

3.1 key characters from the novel

Rashkolnikow

A young, former student who lives in what only could be described as destitute conditions and spends most of his day in a dream-like fever that causes him to sleep at great lengths. He is described as handsome and above average in height with dark beautiful eyes and dark hair. His personality while known for at times being warm and caring, easily shifts to cold-natured and antisocial with an air of arrogance. He spends most of his days in his room, asleep and has long let his law studies fall to the side. Sofia Mareladova

The prostitute daughter of an important sup-plot character who is forced into the profession by her father's inability to support her family. Despite her profession, Sofia is a religious individual and often humbles herself before the needs of others. She is a close friend of Rashkolnikow and frequently checks in on his well-being. Rashkolnikow often compares himself to her, telling her that he too must bear the difficulties of the world by killing the old woman much like she must prostitute herself on the street to support her family.

Alyona Ivanova

The wealthy pawnbroker who Rashkolnikow murders. She is an old, cold, money-oriented person who exhibits little empathy when collecting her due. Pulkheria Rashkolnikova

The desperate mother of Rashkolnikow who holds nothing but hope and love for her son whom she believes has moved away to Saint Petersburg to study law. Until she later visits Rashkolnikow with her daughter, she is unaware of her son's lethargic condition.

Dmitry Prokofyich Vrazumikhin

The loyal friend who often visits Rashkolnikow and attempts to cheer him up and motivate him to overcome his lethargic state.

Porfiry Petrovich

The head of police investigation and continuously suspects the guilt of Rashkolnikow simply because of his mental state. His constant pestering of Rash for slips in his story and pressure, which he knows will crack him, eventually lead to his confession.

3.2 Dostoyevsky

Fjodor Mikhaylovich Dostoevsky was born in Moscow in 1821 as the second of seven children. He was in close contact with his older brother, Mikhail, during his lifetime.¹ Although the family lived in rather modest circumstances, the ambitious father sent his two eldest sons to Moscow boarding schools and later to a military engineering school in St. Petersburg. However, during his school days, Dostoevsky was particularly enthusiastic about literature - first for the works of Russian and French classical music and the German literature of the time of Goethe and Schiller. After his arrival in St. Petersburg he also became interested in the modern literature of his time: Gogol, Balzac, Dickens. One of the great themes of this literature was the loneliness and impoverishment of the individual in the metropolis - a theme

1Lavrin, 2010, pg.7

which Dostoevsky had repeatedly taken up in his works.² After graduating from the engineering school, Dostoevsky worked for a time as a draftsman in the Ministry of War but soon would be able to devote himself entirely to writing. Already his first literary work, *Poor People*, was a moderate success.

On April 23, 1849, Dostoyevsky was arrested together with the other members of the Petraschevsky Circle, and sentenced to death after months of investigation.³ The execution on December 22nd of that year did not occur. After the prisoners had been taken to the square, and the death sentences had been read the imperial pardon was read to them.⁴ The final verdict for Dostoevsky and his colleagues was four years of imprisonment in Siberia and another four years of war service as a soldier.⁵

Shortly after this time Dostoyevsky experienced seizures and was first diagnosed with epilepsy, which proved difficult to manage. Despite this, his condition was probably a major incentive for his literary work. In a change in his convictions, which took place during his imprisonment in Omsk, he swore away his revolutionary ideas completely and began to deal intensively with the Christian faith. His new conservative and partial nationalist attitudes were often criticized by critics.

While still in his military service, he married the dilapidated widow Marija Dmitrievna Issayeva and returned with her and her son to St. Petersburg .⁶ From 1861, together with his brother Michail, he published the journal Wremja (The Time).

With the money he earned through the magazine, Dostoyevsky, at 40, was able to make his first trip abroad through western Europe. In 1863 the Wremja came under heavy scrutiny due to a supposedly anti-government article Forcing Dostoyevsky into a financial crisis. Also, the condition of his now seriously ill wife grew worse and worse and with this he courted the student Polina Suslowa, with whom he had passionately fallen in love. He would leave 2Kluge, Rolf-Dieter; Ludolf Müller; Heinz Setzer 3Lavrin, 2010, pg.21 4Kluge; Müller; Setzer, 1998, pg.21

5Lavrin, 2010, pg.248

6Lavrin, 2010, pg. 33

with her to Europe. While in Germany, however, he fell into another passion, gambling. In a constant financial strain, the two moved through Europe, until Polina finally let him go and he returned financially ruined to his deathly ill wife.⁷ However, after a failed second attempt at managing another magazine, he once again set out for Europe to meet with Polina Suslowa.⁸ It was in Germany that he fell yet again into gambling in addition to the great folly of signing over the publication rights to his previous novels to finance his habit. Polina would for a second time abandon him for his gambling addiction and Dostoyevsky finally returned to St. Petersburg in October 1865.

Under constant epileptic seizures, suffering from creditors and relatives, he had to finish *Crime and Punishment* under immense pressure, even once completely destroying his notes and starting from scratch. From January to December 1866 *Crime and Punishment* finally appeared in stages in the magazine Russki Westnik (The Russian Messenger) and immediately became a giant success.⁹ Even today, *Crime and Punishment* is considered to be one of his greatest works.

The last ten years in Dostoyevski's life were comparatively calm, thanks mainly to the patience and economic efficiency of his new wife.¹⁰ They had two more children, Fjodor and Alyosha. Sadly, Alyosha died at the age of only three. During these years, Dostoevsky wrote some of his greatest novels: Demons and The Brothers Karamazov. On January 28, 1881, Fjodor Mikhaylovich Dostoyevsky died of a pulmonary emphysema at the age of 59.

4. Radio Plays

A genre of story telling having existed since the earliest days of consumer radio technology, the radio drama is the art of performing stories, theater productions, and musicals which are broadcast to those individuals in possession of a radio. Relying purely on audio, these productions use dialogue, music, and sound effects to convey a story that in large part is forced to play out 7Kluge; Müller; Setzer, 1998, pg. 29 8Kluge; Müller; Setzer, 1998, pg. 30 9Kluge; Müller; Setzer, 1998, pg. 30 in the minds of the consumer. Before the era of widespread television adoption, these plays were exceedingly popular and accessible to mass audiences throughout the western world and continue to be enjoyed through various media today.¹¹

The Radio Play is an artistic product developed in the era of radio's popular culture dominance which in addition to an author includes dramatists, actors (speakers), composers, musicians, sound engineers and in particular directors who are all influentially involved.¹² Generations have enjoyed the genre, filling their minds with wonder and lifting storytelling to new, aural heights. Although Radio Plays have been in existence since the popular distribution of the radio in the early 20th century, in was in period after WWI all the way into the 1950s, once television became dominant, that the golden age of the classic radio play left it's mark. This includes famous works such as *The War of the Worlds*, by Orson Wells which was a Radio Play adaption of the book of the same name which famously caused a panic in the United States in 1938 because of some listeners' belief of the story as belonging to a newscast. This has been credited to the productions innovative use of first person, newscaster style of story telling.

Radio Plays often allowed for innovative story telling methods that branched away from simple readings of books or recitation of theatrical plays. Another classic of the genre is *Sorry, Wrong Number* written by Lucille Fletcher who would go on to later adapt the work for film. In the case of *Sorry, Wrong Number*, the play was written specifically for radio and involves a woman who overhears a murder plot through the connection to a wrong number. Experiencing frustration with the telephone service's inability to help her, she eventually realizes the plot is for her own murder and panics, hysterically dialing authorities to no avail. The suspenseful plot makes use of the ability of audio producers to filter the voices of actors and make them sound as if they were on the telephone, a technique that offers potential in a live setting today.

11https://space.org.uk/2014/07/15/what-is-radio-drama/ 12Krug, pg. 14 In many ways, the radio play distinguishes itself from other dramatical forms through as sense of liveness and active creativity on the part of the listener. An editor of *Radio Digest* in the early 1920s remarked: ..."go to a movie and then come home and listen to a Radario and you will have received two exactly opposite theatrical effects.⁴¹³ Tim Crook, a renowned radio play historrian, argues that the genre was in fact not independent from image-based narrative. "I would argue that it cannot be said that the ear cannot see. Blind people see. I realise that this is an oxymoronic statement but I would additionally argue that their brains construct an imaginative world based on image and fully separated from the eye as camera. Their experience is as rich and fulfilling as those who have the eye as camera." He goes on to say that "...'theatre' as a dramatic etymological concept is not exclusively owned by stage or physical theatre.⁴¹⁴

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Many consider the radio play to be a vey active form of entertainment as the listener is challenged to build the imagine in his or her own mind. "Inside the mind of the listener we have the conditions of both the spectator and listener. Audio/radio drama shares the imaginative function which is recognised as ,offstage' in live physical theatre."¹⁶

Similarly, one could compare Radio Plays to another form of audio based drama, the audio book. Despite many similarities including use of spoken word and character acting, Radio Plays and Audio Books are not identical and not a 13Crook, pg 5

- 14Crook, pg 7
- 15Crook, pg 7
- 16Crook, pg 8

part of the same genre.¹⁷ This is due to a few key features of the Radio Play which have existed from its development in the early 20th century and elements made more ubiquitous through technological advance. This includes complex & detailed sound design, explicit and implicit liveness, and a tight integration of musical elements. "It is auditory in the physical dimension but equally powerful as a visual force in the psychological dimension."¹⁸

There have been and may continue to be many definitions of Radio Plays however German *Hörspiel* producer Andreas Ammers provides his own pragmatic definition. "A radio drama is a radio drama when it pays for a radio drama department."¹⁹ While this may be far too practical a definition, it points out an important aspect to the development of the radio drama over the course of its history; popularity and funding sources have remained difficult to secure especially in countries whose radio dramas depend on "listenership" and advertising. Because the radio drama reached its peak before the advent of the television and was quickly reduced to a small player in the entertainment industry by said advancement, radio dramas have remained relatively underresearched as noted by both Hans-Jürgen Krug (the German author of *Kleine Geschichte des Hörspiels*) and Tim Crook (the British author or *Radio Drama*).²⁰ "Radio drama has probably been the most unappreciated and understated literary form of the twentieth century..."²¹

4.1 History of radio plays

The radio play, intially developed early in the 1920's and 1930's, won the attention of widespread audiences in the many western countries. The earliest programmed radio plays were simply performances of traditional theater works such as those of William Shakespeare or Georg Büchner. "1922 has been marked as the year when General Electric's New York station WGY in Schenectady broadcast ,the first dramatic series...and the first sound effects 17Krug, pg. 9
18Crook, pg. 8
19Krug, pg. 11
20Krug, pg. 12

21http://www.irdp.co.uk/radiodrama.htm

were used in "The Wolf", a two and ahalf hour play on the same station."²² Its popularity and development was spread out to many western countries including the UK, France, US, and Germany. In the US and UK its development was marked by commercialisation and focus on entertainment. However, in Weimar-Republic Germany, early radio stations focused on programming that either encouraged or displayed a beautiful, good, and true world.²³

By the start of the 2nd world war it had gained that status one of the world's most popular forms of entertainment. For a time, radio companies were drawing in the finest and most talented writers, producers, voice actors, and sound technicians. "Arthur Miller and David Mamet are two leading American playwrights who have acknowledged the debt they owe to radio drama for influencing and developing their writing abilities. The politically controversial Italian playwright Dario Fo excelled in the radio medium. Wolfgang Bochert and Peter Handke are literary giants in post-war German culture, and their literary reputation stems from their radio output. The director and sound play artist Klaus Schoning has articulated a distinct and original movement in radio drama genre. The foundations of the film directing genius of Orson Welles may well lie in his radio experience as much as in his theatre work. His track record in writing, performing and directing in the sound medium is greater in volume and range than any other media. The most remarkable monument to Orson Welles's achievement in radio drama can now be enjoyed in the multimedia title *Theatre* of the Imagination published by the Californian company Voyager. ²⁴

This golden era of radio dominance was however not to last as by the 1960s, funding for radio programming was in stark decline due to the surgent popularity of the newly popularized television. "Even where the dominance of long-form popular dramas has transrerred to television the audio drama narrative is central to the short narrative communication of radio commercials."²⁵ As a result radio plays were forced to survive on extensive commercialization with heavy advertisement or subsidy as is the case in many western nation 22Crook, pg 5 23Krug, pg. 18

24http://www.irdp.co.uk/radiodrama.htm 25Crook, pg, 1 including the United States (National Public Radio), the UK (BBC radio), and in Germany which has a number of state support stations including WDR and NDR. From beginning of television's dominance to the rise of internet entertainment in the early 2000s, radio plays had been in decline. Tim Crook remarks that subsidized programming in this period have steadily lost audiences over the last few decades.²⁶Speaking in frustration with the way that German Radio Plays have financed their survival, Matthias Thalheim (the head of artistic word at MDR) comments "The problem with Radio Plays is simple; that it has for nearly the last 80 years almost exclusviely been thriving under public license..., typcially funded through the collection of fees and not depentent on feedback or never having to recognize market impulse."27 By comparison, plays found in live theaters, the Hörspiel or Radio Play has inhabited a relative obsure space in modern popular conciousness of recent times. It is primarily a niche artform, one that in many cases has survived through programming on government subsidized radio providers such NDR & WDR in Germany, NPR in the United States, and BBC Radio in the United Kindom.²⁸

The second half of the 20th century may have seen a decline in radio play listernership and production compared to the first half however, the internet has allowed the form to gain a new life. "Multimedia and the Internet offer exciting dimensions to sound drama production and storytelling. The radio dramatist has been liberated from the dimension of short-lived terrestrial sound broadcasts. Erik Ohls and the Swedish Radio Theatre in Finland have been pioneering the use of the Internet for the promotion and more meaningful distribution of radio drama as an art form. "²⁹

26Krug, pg. 8

27Krug, pg 9 28Krug, pg. 8 29http://www.irdp.co.uk/radiodrama.htm

4.2 Recent developements of radio plays

Radio Plays in recent times have benefited from the advent of the internet. Now, these plays are available for download on-demand with various libraries containing plays from different eras of radio. New generations of listeners are being exposed to radio play classics. Radio plays can now be experienced in multimedia fashion and with the complexity of the internet, the genre has significantly diversified itself.³⁰ Additionally, the genre has become independent of radio, which likely indicates an evolution of the genre perhaps in the direction of something completely new. This is in fact similar to how radio plays developed from simple readings of classic theater productions in the early 20th century. It could also be assumed that radio play's existence on the internet will lead to its own newer genre.

Due to the genre's resurgent popularity in the form of podcasts, a number of popular and compelling radio plays have sprung up to meet a renewed interest in drama exclusive to the audio media. Some examples of these include Welcome to Nightvale, The Message³¹ (GE podcast theater), and LifeAfter (GE podcast theater). The recent increase in demand can be attributed to the availability of podcasts and on-demand access on mobile devices. Although radio media continues to be consumed via timed radio broadcast, the podcast form is able to reach a wider audience through the Internet. This lies in stark contrast to the years between the popular adoption of television media and it's resulting dominance, and the advent of the Podcast in the early 2000's. For an extended period leading into the 2000's, the availability of radio plays decreased to the point that only publicly subsidized production such as those made by for example NRD or WDR, two state-subsidized radio production organization, remained available to the public. This also means that commercial funding for radio dramas, previously a staple of their income, had dried up. However, even their audiences had been dwindling before the advent of the modern podcast while during the same period, television was reaching it's zenith of consumption and command of the ubiquitous media consumption

30Krug, pg. 8

31https://www.fastcompany.com/3065471/ge-podcast-theater-returns-with-a-new-sci-fi-thriller-lifeafter

landscape. It is interesting to note however that despite the hiatus in time between the two periods of financial viability, similar uses of financial support were revived and greatly mirrored those that we found in the pre-WWII height of radio media. This is perhaps best exemplified by *GE Podcast Theater* which has since 2016 produced 2 original podcasts that are similar in nature to the podcasts of old but with some modern additions. *The Message* even won an a Weby award.³²

New technologies and the influence of television on the consumer have both altered the style of the modern form of radio play. Access to the Internet allows the producers of radio plays to take advantage of high audio quality and new mixing / recording techniques. Instead of simple effects such as panning and "echo-like" effects, producers and sound designers have at their disposal a plethora of sound manipulation effects and techniques originally pioneered in the television and film industries. Audiences will have become accustomed to modern and high production value audio available in film and television. Modern podcast radio play producers are taking advantage of the technology at hand. However, one characteristic common to many of the original radio plays remains mostly void in modern iterations of the genre. This is the presence of "liveness." All of the GE Podcast Theater productions have been made in advance of their release date. While radio plays of the past often made sound effects on the spot to mimic sounds found in real life, modern plays do not use this feeling of real time creation. Modern radio plays produce their plays with a definite preference for pre-made, polished, often episodic podcasts available for download at any time. This presents an opportunity to regain a sense of liveness in the theater setting while at the same time incorporating the modernity and technical aspects of radio plays.

³²http://www.webbyawards.com/winners/2016/advertising-media/media/best-use-of-native-advertising/ge-podcast-theater-the-message/

5. Live Electronics in Theater

Theater has employed the use of live electronic sound for a number of years going back to its earliest function as an extension of live vocal and instrument sound with various microphones routed to loudspeakers directed towards audiences. As the technology supporting electronic music advanced, so too did its use in the theatrical setting grow and diversify. The use of recorded sound became more manageable with the advances of the analog tape with composers such as Pierre Schaeffer and François Bayle pioneering various means of transforming recorded sound.³³ An additional advancement into the feild of live electronic music was the introduction of sound generators in the form of snythesizers and studio instruments whose purpose was to perform music in live settings. The advent of digitial technologies would begin to place the power of the analog tape as well as sound generators into the hands of a single computer. This allowed for sound synthesis, alteration, and reproduction to be controlled and contained within a single device; one whose size and bulk would consistently decrease over the ensuing years.

As the distinction between sound, noise, and sound effects began to narrow under the compositonal prowess of composers such as John Cage and Edgard Varese, digitally produced/altered sounds were being used within the theater setting to effectively blur the line between music and theatrical sound design. "Characteristics such as rhythm, timbre, even pitch could all be put on a continuum or series of continua." These parameters, eventually also included sound spatializaton, can be extremely precisely controlled, even to the extent that they are given musical characteristics.

Central to a theater production, to re-focus, is the voice and character acting. "It is now possible... to alter the vocal sound and manipulate fragments of vocal sound to create electronic or elector-acoustic extensions in performance and to use these to further enhace, distort, amplify, or accompany the live voice."³⁴ In its simplest form this may be found in the form of looping, originally developed from tape technology but now easily produced with digital

33 Sulzman, pg. 38 34 Sulzman, pg. 29 software. Alongside these loops, additional processes can be utilized to alter the sound including but not limited to filtering and reverberation.

In his lecture at the 2010 *Integrate* festival, composer Peter Kennard discusses his use of live sound processing for his theater productions. "When I work in these situations I find that I'm usually the sound operator, the live musician, the composer, the sound designer, all in one. What I discovered with AudioMulch is that not only could I use it as a fantastic live signal processor, and develop all sorts of interesting sound designs from my performance, I could also plug in actors and start messing around and having fun with their words as well. ...I had three actors on stage and they were working through and reciting a series of Australian poets. Very simple really. I actually started just using loopers, catching, morphing and crunching up their dialogue live. The audience ended up becoming enveloped by a whole lot of rippling voices all generated from the actors onstage live...and then you'll see what happens at the end."³⁵

Live electronic sound, while beginning intitially with the simple amplification of on-stage performers has evolved along-side technology to allow for modern composers to easily manipulate and shape the voices of on-stage performers, adding new character to their performances.

35 Sulzman, pg. 28

Part II

6. Rashkolnikow

Dostoyevsky came up with the idea for Crime and Punishment in the summer of 1865. At the time he owed a lot of money to creditors, while at the same time trying to help the family of his recently deceased brother Mikhail. Originally conceived under the theme of alcoholism, it eventually shifted focus to murder which was inspired by a famous murder of the time.

In a letter to a potential publisher, Dostoyevsky explained that the work was to be about a young man who gives in to "certain strange, 'unfinished' ideas, yet floating in the air." In writing this work Dostoyevsky wanted to explore the moral and psychological dangers ideologies which included "radicalism". While the original novel is famous for a plethora of characters and even various subplot-lines, this adaptation of the novel into a mixed-medio theater piece focuses almost exclusively on Rashkolnikow while introducing only a few supporting characters.

6.1 Characters

Rashkolnikow: A young man who spends most of his day in a dream-like fever that causes him to sleep at great lengths. His nature can best be described as brooding, dark, and whining. His character is the only one to be present physically on stage as the actor.

Sonya: The loyal friend of Rash who is forced to prostitute herself because of her family's inability to support itself. She is selfless and kind, especially to Rashkolnikow who does not necessarily return the act.

Alyona: In this adaptation Alyona is the landlady of Rashkolnikow and is never actually voiced but rather her presence is in the form of the mannequin which rests at the opposite end of the stage from Rashkolnikow's bed (see fig. 6). Her voice also never present during the performance as Rashkolnikow has onesided communication with her.

6.2 Important Themes

In the course of the novel, a number of reasons have been put forward that have led Raskolnikov to his deed.³⁶ The narrator, who always leaves his objective standpoint and blurs oddly with the inner world of Raskolnikov, often contradicts himself in the description of Raskolnikov motive. Raskolnikov, who has written an article entitled "On the Crime" long before his deed, gives an insight into the core ideology of Raskolnikov.

In this article Raskolnikov describes mankind as divided into two categories. The "ordinary" and the "extraordinary" people. As "material" the "ordinary" are the presidents of the status quo - the rulers of the present. They are conservative, decent and obey the laws. In addition to the broad mass of these ordinary people, there are also the extraordinary ones. These can bring the world progress and innovation: they shape the future and prepare it. Such a leadership personality is above the law in force - because it sees where it is flawed and wants to improve it. Such a person must transgress the law in order to change it and lead the rest of humanity into a better future.³⁷ The basis for this idea is the consideration that "all moral values are made by humans and are therefore relative and imaginary."³⁸ A man from the category of the "extraordinary" for his idea wants corpses, he should do so according to Raskolnikov. For this purpose, he makes the following example.

A person who has a new idea that wants to lead the "stupid flock of sheep" into a new direction, which can bring improvement, rises almost by itself above the law because Raskolnikov simply forbids him to continue on the prefabricated rails ,

In the further development of the novel the following theory unfolds: A man who understands himself as "extraordinary" cuts himself off from the others in order to be able to survey everything on a "higher plane." If such a "leader of mankind" rises above "the material," and looks down upon the world and its man-made laws from above, he loses, at the same time, all the directives

36Dostoevsky; Geier. 2010, pg. 541 37Dostoevsky; Geier . 2010, pg. 336 38Lavrin, 2010, S. 71 according to which good is to be distinguished from evil. For these exist only within the established community of values. At the same time he loses his respect for mankind through his own exaltation (his narcissism). This is where Dostoyevsky's religiousness comes into play. It provides the individual with two possibilities to deal with this situation. Either the "extraordinary" generates a completely new value system, according to which he can judge the world, from Raskolnikov's idea. Or he finds his way back to God and his great plan for mankind and thus back to the respect for humankind.³⁹ In version one, Dostoevsky sees the way back to narcissism as inevitable: for without respect to others, the decisions of the individual can only be made by his own Instincts, and desires. Variant two, on the other hand, is a return to the community of mankind. As Raskolnikov, at the end of the novel, freed himself from his "superhumanity" and accepted a higher power over him, he became a man of flesh and blood capable of feeling.⁴⁰

6.3 Plot

Although the plot to *Crime and Punishment* is long and winding with numerous characters who add their own texture to the story, a shortened summary can be made of the novel, especially for those elements most relevant to this theatrical interpretation which inevitably cannot include all plot points and characters.

Raskolnikov, a lazy ex-student, rents a tiny room in Saint Petersburg. After refusing all help from his friends, Rashkolnikow concocts a plan to murder and rob an elderly money-lender, Alyona Ivanovna in his desperation to pay back a series of debts which he has accrued through both his laziness as well as illness. His willingness to murder stems from the overwhelming sense that he is justified in killing the old woman by his alleged power stemming from his own perception of self-greatness. Eventually convincing himself of the murderous course of action, Raskolnikov sneaks into Alyona Ivanovna's apartment and

39val. Bonevac, Daniel: Lecture 3, Dostoevsky and Nietzsche, of UGS 303, Ideas of the Twentieth Century, at the University of Texas at Austin, Fall 2013 https://www.youtube.com/watch?v=Fz_srDeCNTQ, abgerufen am 14.12.2014, Minute 25.

40Bonevac, Daniel, 2013, Minute 36

murders her with an ax. In the heat of the process, he also kills her half-sister who unexpectedly stumbles onto the scene of the crime. Not fully aware of his actions, Raskolnikov manages to get away with a few items, leaving much Alyona Ivanovna's belongings untouched. He then escapes and, miraculously manages to leave unnoticed.

Afterwards, Raskolnikov begins to obsessively worry about the murder. He stows the stolen items under a pile of rubble, attempting to remove any trace of blood from his clothing after which he falls into another fever due to his exhaustion. This same feverish state comes and goes in the coming days and Raskolnikov exhibits strange behaviour including defense and paranoid reactions to whomever discusses the murder of the old woman, Anlyona Ivanova. In this way, Raskolnikov draws more and more attention to himself surrounding the crime.

Inevitably, Raskolnikov becomes acquainted with the detective Porfiry, who suspects him of the act on purely psychological grounds. Raskolnikov and Porfiry continue to meet for various reasons and Raskolnikov's motives for the crime become uncovered. The detective becomes increasingly certain of the man's guilt, but still has no basic evidence or witnesses to support his claim. Despite another man's claim to having committed the murder, Raskolnikov's nerves continue to wear thinner which gives him the growing urge to confess. One of his most trusted friends named Sonya, a girl who out of necessity turns to prostitution to make a living, eventually discovers the truth behind his actions. It is her that attempts to convince he to confess and turn himself in. Raskolnikov torn by a desire to speak the truth yet retain his innocence; is pressed by Sonya to confess. The detective, Porfiry confronts Raskolnikov with his growing suspicion of his guilt and assures him that a confession would ease a sentence. Despite believing that he might get away with a perfect crime, Rashkolnikow is eventually persuaded by Sonya to confess and end his suffering and internal turmoil. It is not until the paranoia becomes completely overwhelming, engulfing his ability to function completely that he confesses to murdering the old woman and in doing so finds a bittersweet form of relief.

Here follows the over-arching plot of *Rashkolnikow* with a list of the scene. Below is the chart version of the play's structure.

I. Introduction:

We see Rashkolnikow laying on the floor as if he were a pile of blankets. Beginning of music and sound design.

II. The Dream:

Rashkolnikow, who is still laying on the floor of his rooom, dreams of a woman laying on a wet and dirty street gutter who is clearly worn and beaten. Two passersby, a woman and a priest, notice her and speak to her. They instantly recognize that she is a prostitute and instead of assisting her, the proceed to berate and kick her, calling her names. This is Sonja's reality but Rashkolnikow's perception of himself. This portion consists entirely of sound design.

III. Sonya comes to console:

The blurred awake and sleep state is abruptly broken by a series of character entrances. Sonya softly comes in to check on Rash and sooth him awake. She warns that Alyona Ivanovna is coming to visit later. As Rash proves unresponsive and uninterested in waking further for her she begins to leave. As she goes Rash slips back into his state of drowsy contemplation where he takes a kind of pity on her and seeks to identify with her. Sonya's character is never seen but only heard through the loud speaker system. IV. Alyona Ivanovna comes to demand:

Alyona, embodied by a dressed mannaquin, speaks formally to Rash. At first she seems to be concerned with his health and well-being. However, she eventually moves to her real motive, getting the money owed to her. She eventually shows that she doesn't care at all for him but begins to point out ways she can get money from him. Her tone becomes nastier as she complains of all the others who cant pay on time and how Rash is like all the others. Eventually, Rash says he can find the money but needs more time. She gives him two days and by this point her voice is disgusted and uncaring. She leaves leaving Rash excited and frustrated.

V. The Idea:

At first Rash attempts to plan how he could get the money to pay her. Quickly, he begins to point out how people like alyona take advantage of others. She doesn't need the money anyway. How much better it would be if she simply didn't exist. People, especially great ones like him, shouldn't have to be beholden to cruel woman such as Alyona. Someone should end her. It wouldn't be hard, especially for someone as brilliant as he. Rash becomes enticed by the idea of ridding the world of Alyona. He presses forward with the simplicity of a plan to murder her. No one would know or care. No one. He would being doing the world a favor. His problems would be solved. His height of excitement overwhelms him and he collapses in a state of exhaustion however, not before agreeing with himself to at least go through everything up to the point of the murder. Surely, he wouldn't murder someone.

VI. The Murder:

In silence, Rash slowly walks up to the figure of Alyona and presents her with Raz's money with one hand. With the other he begins to violently coat the figure in red paint, increasingly in an angry state. The scene ends with Rash who exhausted from his murdering of Alyona, collapes in front of her. Lights out.

VII. Greatness:

Unaffected by the mess he has created, Rash walks proudly around his space proclaiming his greatness and his cunning in so easily achieving the perfect murder. The knocked over figure of Alyona is overturned. VIII. Flashing: Rash and Sonya both enter his space because of the loudness they've heard. They find Rash fully engrossed in the mess of the space. At first they are pleased to hear him awake and energized but slowly learn from his mood that something is wrong. They ask how is space has become so clouded. Rash becomes suspicious and answers incoherently. He becomes defensive and then turns on them, accusing them of accusing him or murder. He did not commit the murder. Rash falls in and out of a dreamlike state. One is in which Sonya prostitutes herself to Rash. Another Dream in which Rash yells at Rash to tell him he's weak for working to get money and then throw it away on people who don't work. Another Flash of him looking for the discarded figure of Alyona in the mess. Another Flash of Rash sleeping in a sickly state. Another flash of Rash painting red onto the body of his friend Rash.

IX. Confession:

Rash wakes covered in the filth of his room. He hears voices around him. The voices acuse him. He doesn't have the strength to hold them off. He attempts to argue with the voices about details of the crime scene. The specifics of the voices go far beyond what was shown on stage. He cannot effectively prove his innocence. Under this pressure, he begins to scream, describing the murder of Alyona in detail. After begging for her forgiveness he collapses on the floor and lights out.

Act		I Sleep-Wake Visits			
Duration	26 min				
Description	scription Setting upt the characters and the motivation for the murder.				
Scene	Introduction	Sonya comes to console	Razumikhin comes to motivate		
Duration	3 min	5 min	5 min		
Description	We see Rashkolnikow in various states of wake and sleep ending in sleep	softly comes in to check on Rash and sooth him awake. She warns that Alyona Ivanovna is coming to visit later. As Rash proves unresponsive and unteressted in waking further for her she begins to leave. As she goes Rash slips back into his state of drowsy contemplation where he takes a kind of	Razumikhin trys to cheer up Rash by reminding him how beautiful the day is and that he's found a job for Rash. Rash responds with complaints of him being sick. Raz manages to get Rash to get up and move a little. The two dance together and remember times that they had together in their past. "You know I'd do anything to help you, brother." The breif positive swing in the mood is again interrupted by a pound on the door and the voice of Alyona Ivanovna.		

Chart from of Scene Progression

Alyona Ivanovna comes to demand	The Idea	The Dream
5 min	4 min	4 min
Alyona, embodied by a dressed mannaquin, speaks formally to Rash. At first she seems to be concerned with his health and well-being. However, she eventually moves to her real motive, getting the money owed to her. She eventually shows that she doesnt care at all for him but begins to point out ways she can get money from him. Her tone becomes nastier as she complains of all the others who cant pay on time and how Rash is like all the others. Eventually, Rash says he can find the money but needs more time. She gives him two days and by this point her voice is disgusted and uncaring. She leaves leaving Rash excited	At first Rash attempts to plan how he could get the money to pay her. Quickly, he begins to point out how people like alyona take advantage of others. She doesnt need the money anyway. How much better it would be if she simply didn't exist. People, espeically great ones like him, shouldnt have to be beholden to cruel woman such as Alyona. Someone should end her. It wouldnt be hard, especially for someone as brilliant as he. Rash becomes enticed by the idea of ridding the world of Alyona. He presses forward with the simplicity of a plan to murder her. No one would know or care. No one. He would being doing the world a favor. His problems would be solved. His height of excitement overwhealms him and he collapses in a	He dreams of an incident from his childhood in which he witnessed a group of peasants sadistically beating an old mare to death and
and frustrated.	state of exhaustion.	him away.

II Murder	II Murder						
17 min							
Sonya comes to encourage	Rash Plots the Murder	Intervention	The Murder				
4 min	3 min	5 min	5 min				
Sonya, knowing how sick Rash is							
and how stressful a visit from							
Alyona must have been, checks							
on Rash. Waking him softly, she		Raz, hearing the excitement					
obviously likes him. He shows		coming from Rash's room,					
little appreciation of her kindness		comes in to find out what is					
and interests himself rather in		making his friend so happy. Of					
how it is up to great people to		course, Rash cannot confess					
carry out necessary actions. He		to Raz why he's in such a good	, , ,				
likens himself to a great military		mood. He seeks to cover up	walks up to the figure				
leader. He points to her own			of Alyona and				
00 0 1	Rash continues to plot the	at his friend and sending him	presents her with				
	murder, repeating how simple		Raz's money with one				
	it would be. He is positively		hand. With the other				
	excited about carrying out the		he begins to violently				
	murder, all the while saying he		coat the figure in red				
	would never actually kill		paint, increasingly in				
talk and fades away.	someone.	shut out Raz nonetheless.	an angry state.				

III Greatness								
19 min								
Greatness	Flashing	Dwindling	Confession					
2 min	8 min	5 min	4 min					
2 11111		5 11111	4 11111					
	Raz and Sonya both enter his space because of							
	the loudness they've heard. They find Rash fully		Eventually he					
	engrossed in the mess of the space. At first they		confesses fully,					
	are pleased to hear him awake and energized		saying he did in					
	but slowly learn from his mood that something	Rash wakes covered in the	repeatedly. He					
	is wrong. They ask how is space has become so	filth of his room. He hears	awakes from a					
	clouded. Rash becomes suspicious and answers	voices around him. The	dream-like state					
Uneffected by the	incoherently. He becomes defensive and then	voices acuse him. He	with more clarity					
	turns on them, accusing them of accusing him	doesn't have the strength to	that at any point in					
	or murder. He did not commit the murder. Rash		the whole play to					
	falls in and out of a dreamlike state. One is in	to argue with the voices	see his friends near					
	which Sonya prostitutes herself to Rash.	about details of the crime	him staring at his					
с С	Another Dream in which Rash yells at Raz to tell		side. They seem					
	him he's weak for working to get money and	voices go far beyond what	unresponsive. They					
• •	then throw it away on people who don't work.	was shown on stage. He	only pick him up					
	Another Flash of him looking for the discarded figure of Alyona in the mess. Another Flash of	cannot effectively prove his innocence. Under this	and lead him out of the space while					
· · ·	Rash sleeping in a sickly state. Another flash of	pressure, he begins to	Rash seems to					
	Rash painting red onto the body of his friend	scream, desicribing the	acknowledge his					
of the space.	Raz.	murder of Alyona in detail.	fate.					
		indiaci er rayona in actain						

6.4 Script (sample)

<u>The Dream</u>

We can imagine and almost hear wet ground.

It's raining

There's a slight blur to the audio and a filter dulls all of the colors.

(we hear the sound of a car stopping, a door opening and a body falling to wet earth. The door closes and the car drives off. More sounds of rain as we only hear the breathing or a girl who is exhausted but not crying. Brief moments pass as we hear faint footsteps walking past. Finally, we hear a clearer set of footsteps walking up to the body of the girl) (all of the following text is spoken in Russian)

Man 1: Get up!

Look at her!

I can't believe she's just laying there. What a miserable creature.

Woman 1: What? (just noticing)

Man 1: (disgusted) I said, can't you see that mud-covered pile of cloth just laying there.

You know what she is.

Woman 1: Of course I do, doesn't everybody?

(she laughs, knowingly)

Man 1: I suspect "everyone" does...

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Woman 1: (her tone changing to judging) and how did she end up like that in the street?

Woman 1: (pause to think) filth

(footsteps step closer and stop)

(Woman gazes over girl laying on ground)

Woman 1: Why won't she get up?

Man1: probably because she's in the dirt where she belongs.

Woman 1: (to the girl but not with a kind voice) get up, girl!

Man1: you mean 'whore' don't you?

Woman1: (pretending to show kindness but actually showing disgust) get up... (awkwardly) dear

(silence after the girl does not respond to the woman's feigned kindness)

Woman1: (slightly more forfully) get up...bitch!

(we see the dress of the girl beginning to move slowly forward)

Man1: are you really so weak? I think your 'whoring' has finally given you exactly what you deserve.

Woman1: oh father(meaning preist), (in an overly religious tone) how could heaven make room for me if God let's in that trash.

Man1: trust me, God would never allow this...thing to walk through the gates.

(the girl is still trying to crawl forward)

Man1: God knows exactly what she's done (to the girl) and he knows exactly where you spread your whoring legs.

Woman1: Oh!

Man1: ...yes, to every client in town high and low, Get up!

(he shoves her with his foot)

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Man2: (from a distance) oi, what's that there father?

Man1: (turned to Man2) just dirt, just a cloth

Woman1: (to the girl) get up, you bitch!

(shoving her with her foot)

Man1: (back to the girl) why won't you get up.

(he shoves her again. All the while the girl is struggling to crawl foward)

Woman1: she must love the mud, get up you whore!

(shoving continues with increasing intensity)

Man1: get up!

Woman1: get up!

(both begin shouting at the girl)

Both: (incoherently) get up! You whore! Look at her crawl in the mud. She's pitiful! She's a whore...

(The shoving has turned to kicking as the garment we see in the video has become covered in mud and the body of the girl no longer moves on the ground. Eventually both the woman and the man have lost the energy to kick the girl and call her names. We hear now only their heavy breathing .

Eventually their breathing slows and we hear a ruffling of clothes as the two of them pull themselves together. They turn and head away from the girl and we hear their footsteps as they begin to discuss the church services earlier that morning.)

Woman1: (cheery) it was an excellent service this morning, father. Just beautiful.

Man1: (cheery) Thank you my dear. God has blessed us with a truly wonderful organ player hasn't he?

Woman1: oh yes.

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(Both of their footsteps fade into the distance as the camera shot remains on the mud stained dress. We eventually only hear the faint breathing of the girl as continues to struggles to regain herself.)

7. Stage Design

The stage is arranged as the corner of a rectangular box with one longer wall met at the corner by a shorter wall; both meeting at a right angle. Where these two walls meet we see worn and tattered blankets laid out near the corner which appear to be some sort of bedding setup. It would seem as if this assortment of discolored and tattered blankets strewn across the ground form the spot where Rashkolnikow spends most of his time either asleep or in a daze-like state. The shorter wall of the two, which is an off-white and gray in color, is void of any artwork or distinguishing features other than a small black hole that would almost be indistinguishable if not for its stark contrast to the plain wall which surrounds it. Perpendicular to this wall is the longer wall which is also painted the same off-white, gray color scheme but has at its far end both a painted old standard-sized wooden door (non-functioning) and a painted picture frame (1,5m x 1,5m) with nothing inside but the same color palette of the surrounding wall. Not more than 1 meter from the door at the far end of the stage opposing the bedding setup is a plain female mannequin with no face but rather a woman's hat decorated only by a single red feather, prominently stuck to its side. As lighting is not the focus of this paper, an in depth description of its layout would seem out of place however it is necessary to note that likely a setup will be chosen that both emphasizes cooler colors over warmer while also giving the ability to cast a few abstract shadows based upon the position of the actor during the performance. The majority of the lighting will not be changed during the performance however, for scenes involving the mannequin, a spotlight will be used to emphasize it's use.

The audience forms a semi-circle around this rectangular stage setup and the chairs are placed at the same level as the stage meaning the stage is either semi-raised or not raised at all compared to the audience. Surrounding the audience is a 4 channel audio setup positioned so that two speakers give the audience a right-left stage sourced sound and the other two from behind the audience. The electronic musician, or person who manipulates the computer software to interact with the real-time sound as well as tape elements is seated either behind the audience or out of view so as not to distract from what would otherwise be a very computer oriented performance regardless.

7.1 Evolution of Stage during performance

The set design is to appear plain, simple in the initial phases of the performance. As Rashkolnikow plays with the idea of murdering the wealthy landlady, he begins to "pick" at the black spot just above his bed. As he begins to pick at the hole (while also believing in his own greatness and plotting the murder of the landlady) it grows drastically in size and begins to bulge inward into the space. This bulge of black material presses into Rashkolnikow's room, eventually consuming his entire bedding area and as far as half way into the stage area (or room). By the time he carries out the murder, the bulge has pushed all the way past his bed and his personal space is almost entirely consumed. Throughout the rest of the play he must live with this unsightly, inconvenient, troublesome, obvious seeming truth which is represented by the huge bulge extending into the space. Towards the end of the play Rashkolnikow realizes that the burden of his deed has become too great and the burden (bulge) breaks open and consumes the remainder of control in the space. This symbolizes his loss of control and the mess created by his belief in his personal greatness above other individuals. This loss of control shows that he is in fact not better than others and in fact not a super human but rather a poor, sickly, jobless man who has nothing in this world other than the realization that he has committed a crime for which he is thoroughly guilty. The play ends with his "drowning" or consumption in the black material that breaks from the bulge.

8 Music and Sound Design

The muted color palette and preference for minimalism found in the set design are to be mirrored in the choices effecting the music and sound design of the play. This is accomplished through the use of drone-like elements, recorded voice, environmental sounds, and live-processing taking into account the works of electronic music composers whose works also incorporate these elements. These composers include Michel Chion, John Cage, and Robert Ashley.

Generally, the sound can be broken into two types; live-processing and tape portions. The live processing portions will only involve input from the actor's microphone which will be attached to them throughout the performance.

8.1 Audio Setup

The audio setup for the play will require only 1 microphone input channel and 4 loudspeaker output channels. This is of course excluding the monitor setup which supports the actor playing Rashkolnikow as well as the 1 computer musician and may require upwards of 3 separate, ground-level loudspeakers which are often standard from concerts and theater productions. The monitor system will amplify a mix of all audio output channels which will be balanced and mixed according to the needs of the actor and electronic musician.

Wearing a mobile headset microphone, the actor's voice will be able to be transmitted to the audio system wirelessly. With software written in MaxMSP, the signal will be processed, mixed, and sent back out, first from the digital to analog converter, then to the mixer and finally out through the 4 channel audio system.

8.2 Musical and Sound Design Motifs

The theater piece Rashkolnikow utilizes a few key elements or structures to reinforce the main themes of hubris and reality vs. self-made fantasy. Ideas present in the music and sound design are intended to reinforce these themes through recurrence and development which allow the listener to glean a connection between the stage acting and music/sound design. These reoccurring sound elements are to be found in the fixed, tape portion as well as the live processing portion.

Supporting the theme of false perception of ones own greatness are a number of elements including the use of various bell sounds, reminiscent of church bells. These recordings of bells can be found in various pitches and densities but are to be used to signify the gravity of decision. Also falling into the category of "self-perception" is the use of an organ sound which is meant to evoke a sense of religion. Together the bells and the organ make reference to religion which was to Dostoyevsky one of the central themes to his text. He might argue through the text that reliance on the greatness of mankind, or in this case a single man, could only lead to downfall. Whereas religion and by extension its teachings on selflessness were the only appropriate means of forming ones moral code which is personified by Rashkolnikow's friend Sonya who is forced into prostitution as the only means to support her family. In this way, the use of organ and bells reinforces this concept.

Another dominant sound source is the use of rain or "rain-like" sounds which come from recordings as well as being synthesized in Max. The rain is present to set a heavy and foreboding atmosphere throughout the piece and is often used in conjunction with the organ and bell sounds.

An important theme in the play is the two states of consciousness that exist for the character Rashkolnikow. At least half of the time, he exists in a dream like state which gives him an inordinate amount of time to consider his greatness and plot the "perfect murder" of his landlady Alyona. Although the performer will always speak his lines, in dream-like states his voice will be altered in real time with various processes that are facilitated with the microphone setup otherwise used to amplify his voice in his instances of "normal" consciousness. During these so called normal periods, the actor's voice will be amplified but only played out of the front two left and right loudspeakers directed toward the audience. In addition to the amplified voice of the actor, tape playback will also be used to both embody the other characters as well as provide setting through a light mixture of music and sound design. The far more dynamic, and arguably interesting, portions of the play are those that take place inside of the mind of Rashkolnikow when he becomes lost in his own delirium and thoughts. For these phases, live changes of the actor's voice will be used to clearly signal to the audience that the setting has changed. Often the actor will not return to his initial position at the start of the play where he was laying half asleep in his collection of rags that he calls a bed. This means that

as he stands in the middle of the stage continuing his dialogue, the only indication that the scene has changed to the depths of his mind is the addiction of effects & changes on his voice. It should be noted however that the prerecorded actors will never be subject to these effects in a live format.

8.3 Live Processing

The software for the play Rashkolnikow will be written in MAXMSP which is a visual programming language that makes use of an extensible graphical user interface to allow for a simplified program creation experience. This software allows for seamless interaction between audio input, controllers, audio manipulation processes, video, and video manipulation processes. All of these capabilities will prove necessary during the performance of the work. Regarding the video component of the performance, there are 3 sections which require the starting and stopping of recorded video with light elements of video manipulation. These sections include dream sequence, post-murder, and closing release however are not touched on at great length in this paper due to their relative obscurity in the overall design process. The second scene or "The Dream Sequence" requires only the appropriate starting and stopping of a prepared audio track. This will be instigated by the electronics performer who more or less has full control of the electronics throughout the performance.

For the live-processing portions of the play, 3 effects have been created that signal to the audience that the play has moved into the mind of Rashkolnikow as opposed to presence in real-time. These effects include a crackling effect, sound freeze, and wave follow. These effects may be applied individually as well as in summation to each other and will also occur in tandem with various tape portions to be triggered at the correct moment in the play.

The crackling effect is little more than an amplitude driven series of clicks that is mixed into the incoming audio signal through means of convolution. In the MAX software an object known as peakamp~ analyzes incoming audio signals at a rate of once every 20 ms to determine the peak amplitude of the signal. If the signal crosses the set threshold (0.2) then the amplitude value is sent to a scale object which scales the values from 0.0 - 0.2 to 200. - 50. This

serves two functions both scales the values as well as reversing the increasing/decreasing order. These values are then sent to a metro object which regulates the speed of the clicks. The metro object is only turn once the threshold has been exceeded and a value is sent from the scale object to regulate it's speed. The speed of the clicks will as a result remain linked to the amplitude of the actor's signal. Once the clicks are generated using the simple click~ object, the amplitude of the clicks themselves is altered randomly with every instance of a click. The click signal is then convolved to the same incoming live signal from the actor used to analyze the amplitude. Convolution is a manner of cross-synthesis which combines two audio signals in such a way that the shared frequencies are proportionally emphasized.⁴¹ Before the live signal is sent to the convolution object, it is randomly filtered by one of 3 filter types; bandpass, highpass, or lowpass. The type of filter changes with every instance of a click. The final, convolved result is then sent out to a spatialization process which also change the spatial position of the convovled signal with every instance of click. The spatialization is managed by manipulation of a series of objects sourced called the HOAlibrary developed by CICM in France. "HOA Library allows musicians and composers to synthesize, transform and render sound fields in a creative and artistic way. This library facilitates the understanding and the appropriation of key concepts of ambisonics."42

The intended use of the crackling effect is to mimic the sounds of rain presented in the introduction as well as dream-like sequences however represent the digital form of these sounds. During the play, as the transition from real-time to suspended inner thoughts occurs, crackling is one of the effects that helps to provide a clear signal to the audience that something has changed. The intensity of crackling is designed to increase with the intensity of the performers voice due to its direct link to amplitude.

The second live process is wave-follow which produces short, amplitude dependent bursts of simplistic wave signals that mimic the characteristic of the live audio-input. The process relies heavily on the use of the fiddle~ object

41 Hass, Introduction to Computer Music

42 http://www.mshparisnord.fr/hoalibrary/en/

developed by Miller Pucket in the late 90s to estimate the pitch and amplitude of an incoming sound. An analysis to determine the two most dominant frequencies is used to perform a convolution of these dominant frequencies onto the incoming live audio signal. Once the convolution process is performed, an additional amplitude gate fades in or out the signal and is controlled by an amplitude threshold using the same object for amplitude detection as in the crackling process, peakamp~. The end effect is one of a sawtooth wave mimicking the speech patterns of the actor on-stage, especially when they speak particularly intensely. The spatialization also utilizes the HOA library of objects to spread the signal channel throughout the space only in this instance, the motion of the signal between the 4 channels is linear (circular) meaning that it pans in a circular motion around the space. The movement is triggered randomly by the crossing of the amplitude threshold set by the peakamp~ object threshold previously used.

The use of the wave-follow live process is intended to be used sparingly and at the more intense portions of "inner-dialogue" as the effect can easily become tiresome due to it's use of simplistic wave forms. Sections of the play where the effect will be of greatest use include the plotting of the murder, the murder, and the final scene of redemption.

The third live process to be used is the sound freeze which seeks to mimic the sounds of the organ or perhaps bells found in the tape portion of the music/sound design. This live-process uses a process known as granular synthesis to playback an image of an instance of sound which is save into a buffer. The selection of the instance of sound to be frozen can be set by the electronic muscian at their own desire or can be attached again to an amplitude threshold where moments of great intensity will cause the voice of the actor to freeze and hold in place. The spatializaton of the sound is purely randomized and designed to move freely around the 4 channel audio environment whenever triggered.

The intended use of the effect is for all instances of "inner-dialogue" due to its relative subtlety yet clear implementation. The volume of the effect will obviously need to be regulated to fit into the scene depending on its intensity however, the audience should have a clear realization of its immediate use.

Connecting modern radio plays with the theater setting presents the unique opportunity to incorporate live audio processing, which is apparently increasing in popularity across the theater world according to theater composer Peter Kennard. ⁴³ In his own theatrical productions he has been incorporating modern audio-processing techniques.

For all of the reasons to use strong tape elements in Rashkolnikow, practically proves to be one of its strongest arguments. With the use of prerecorded actors and elements, there are simply fewer things to worry about during and in preparation of a performance. When portions of the voice acting occur in a previously recorded setting, fewer actors are necessary to organize performances and perhaps even more important, the focus of the production is able to primarily be directed at the central cast member, which is the perfect situation in the case of *Rashkolnikow* as the play focuses on Rashkolnikow and the inside of his mind.

9. Composition Design

The Opening Section

In the introduction, a series of statics produce together swelling harmonies that meant to introduce the fleeting character of Rashkolnikow as well as to show the first instances of the 3 main harmonies which will present themselves in various forms throughout the work, especially towards the end with heavy use during any period of urge to follow through with actions whether that be in the case of carrying out the murder or eventually confessing to the murder. These are harmonies are generated with the overlapping of various sine waves to produce a kind of synthesizer within the software. Additionally, we are introduced to various high pitches that linger for moments in the space, much in the same what a sine one would when produced electronically or in the way that tinnitus might affect the hearing on an individual. This is high tinnitus serves as

43 http://www.audiomulch.com/articles/peter-kennard-theatre-sound

the beginning of the self-righteous madness that will later manifest itself in Rashkolnikow through his belief in his own greatness. These flows of chords and tinnitus are finally broken up by the abrupt introduction of new material in the form of "rain-sounding" electronic sounds and mimicked rainfall from the static sounds themselves.

The Dream Sequence

Immediately following the introductory section, we find ourselves in a the beginnings of mixed sound design and live-processing. A blurred, abstract video displays images of a dirty dress laying on the ground while we hear a synthetic sounding rainfall. This rainfall was led into by the use of static sound from the previous introduction section. The rainfall becomes lighter and we begin to hear footsteps getting closer to the space through the use of pointed sound design. At some point the footsteps have become very close and they completely stop. With their stop, the rain also falls back into the background with the static also ending their rain-mimicking gestures. In Russian we began to hear a conversation between a woman and a man who seem to be judging the dirt colored dress on the screen. The strings swell with versions of the opening chords in between breaks in the text. At some point the conversation, after much laughing and judging, the dress on the screen gets shoved a little to side. With this shove a previously unheard "digital" flourish is heard in the sound design. The flourishes increase in density and volume as it appears the dress begins to move forward. However, laughing and taunts follow the moving dress (in Russian of course) which grows in volume and density as well as the dress moves. Eventually the we hear the steps approach the dress on the video and kick it, stopping its motion forward as well as the flourishes both in the sound design as well as from the strings. We hear in total 3 of these kicks with the last being the loudest and strongest, silencing all other sound from around the area. The video begins to fade out and we hear steps walking away with laughing voices following them. The sound of light breathing closes the scene. The following scene includes the first instances of mixed interaction between tape sound and liver performer.

10. Closing

In conclusion, Dostoyevski's novel *Crime and Punishment* is a large and influential work that remains a part of the literary cannon of the western world. Such a large and renowned work has experienced numerous attempts to be adapted to the theater setting with few able to grasp the entirety and magnitude of the work simply because of the size and complexity on the novel itself. This adaption in no way attempts to capture the scope of the novel but rather the complexities of the character Rashkolnikow. His belief in his own greatness and addiction to lethargy both contribute to his eventual downfall. Although the original novel presents the reader with the understanding that freedom in the end stems from his ability to confess and revoke his esteemed opinion of himself, this adaptation focuses on the perils of becoming lost in one's own thoughts.

In order to enhance the fantastic nature of Rashkolnikow's mind, a mixture of sound design and physical set design techniques will be used. The sound design is inspired by radio plays and their ability to combine spoken character acting with liveness in the audio realm. The stage in which the play takes place represents as much the room in which he resides but also his mind and the festering of a dark idea that grows and becomes unimaginable, consuming his existence. In composing the music for Raskolnikow it was important to create a varying sound world for the character's inner turmoil as well as his eventual realization of the true world around him. Live electronics as well as pre-recorded sounds starkly transition into and out of this turmoil. This has led me to understand that the contrast does not lie in a live vs. recorded difference but rather a musical interpretation of clarity vs. confusion. Clarity is represented by clear gestures and simplistic tones whereas confusion by incomplete gestures and a more randomized tone selection. Inspirational works include John Cage's Imaginary Landcapes, the music of Rufus Wainwright in Shakespeare's Sonettes, and Michel Chion's Regium.

The piece evolves in a kind of arch where the sound moves from simplicity to chaos before the murder and from chaos to simplicity afterwards.

Mirroring this dramatic arch is a musical one used for a pre-recorded to synthesized/live processed transition

The electronic portion consists of processed sound generated from the string instruments, a very simple sine wave, and recorded text. Processes to be used include convolution of voice and sounds, pitch shifting, distortion, ring modulation, and looping.

The computer musician enhances for the audience what Raskolnikow is experiencing. In some moments one hears the mumbled pleas of those who visit him to care for him and in others the inner dialogue that convinces him to carry out the murder. Therefore the sound design does not represent any character other than Raskolnikow although at times recorded versions of the other characters will be played via the electronics.

Having the actor and computer musician so close to the audience automatically makes the music more intimate. One's association of a sound to its source is clear and, in a sense, very real as opposed to any amount of distance or amplification necessary for a traditional setting. Because we intend on using microphones on the actor, we will have the ability to broaden and shrink the piece's perceived space.

My goal as an artist in creating the music/sound design for this dramaturgical production is the exploration of intriguing connections between genres and mediums that allow an individual to experience music in unexpected ways. The seamless application of differing elements requires a great deal of research and failure but most of all, the insight that often comes from collaboration with others. The term "others" can refer to colleagues in the realm of composition, visual artists, sound engineers, and even my audience. Possible future performances of the work would require a completed script and finding an actor who would essentially perform a one-man show. However, much of the musical elements have been prepared as well as the software in support of a live performance. Additionally, as the stage design concept has been completed in advance, much of the preparatory work has been completed. With additional effort the work would even have the opportunity to be performed.

11. Photos

Figure 1 Rashkolnikow gets the idea to murder Alyovna



Figure 2 The idea to murder grows



Figure 3 The idea to murder becomes unreasonably large, coming through the wall.



Figure 4 The material bulge from the wall has burst open





Figure 5 The mess of the bulge has engulfed the entire set



Rashkolnikow's Costume

Figure 7 Alyona'a representative figure

Figure 8



12. References

Beer, Jeff. "GE Podcast Theater Returns With A New Sci-Fi Thriller." Fast Company. November 16, 2016. Accessed May 31, 2017. https://www.fastcompany.com/3065471/ge-podcast-theater-returns-with-a-newsci-fi-thriller-lifeafter.

Bonevac, Daniel: Lecture 3, Dostoevsky and Nietzsche, of UGS 303, Ideas of the Twentieth Century, at the University of Texas at Austin, Fall 2013 https://www.youtube.com/watch?v=Fz_srDeCNTQ

Crook, Tim. Radio drama: theory and practice. London: Routledge, 1999.

Crook, Tim. "International Radio Drama - Social, Economic and Literary Contexts." International radio drama. Accessed May 31, 2017. http://www.irdp.co.uk/radiodrama.htm.

Dostojewski, Fjodor; Ralf Schröder (Hg.): Dostojewski Briefe. übers. von Waltraud Schroeder, Wolfgang Schroeder und Andreas Pham. - 2. Bd. Frankfurt am Main: insel taschenbuch 1234, 1990

Gerigk, Horst-Jürgen: Dostojewskijs Entwicklung als Schriftsteller. Vom ,toten Haus' zu den ,Brüdern Karamasow'. - Frankfurt am Main: Fischer Taschenbuch, 2013

Hass, Jefferey. "Introduction to Computer Music: Volume One." Chapter Four: Convolution. Accessed June 20, 2017. http://iub.edu/~emusic/etext/synthesis/chapter4_convolution.shtml.

Lavrin, Janko: Dostoevskij. - Reinbek bei Hamburg: Rowohlt Taschenbuch Verlag, 29. Auflage: 2010 (1. Aufl.: 1963)

Krug, Hans-Jürgen. Konstanz, UVK Verlagsgesellschaft mbH, 2008

Salzman, Eric, and Thomas Dezsy. *The new music theater: seeing the voice, hearing the body*. New York: Oxford univ. press, 2008.

"Peter Kennard on Theatre Sound." Peter Kennard on Theatre Sound | AudioMulch. Accessed May 31, 2017. http://www.audiomulch.com/articles/peter-kennard-theatre-sound.

"GE Podcast Theater: The Message." The Webby Awards. Accessed May 31, 2017. http://www.webbyawards.com/winners/2016/advertisingmedia/media/best-use-of-native-advertising/ge-podcast-theater-the-message/.

Note on photos:

Figures 1-8 credited to Rosa Wallbrecher, 2015