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AUTISM: A SONG OF UNDERSTANDING

by

Hannah M. Babcock

A Thesis Submitted in Partial Fulfillment
of the Requirements for a Degree with Honors
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Abstract

Autism: A Song of Understanding is a musical composition inspired by Autism Spectrum Disorder (ASD) which summarizes the entire spectrum through three common categories of symptoms: language, social, and behavior. The piece consists of three movements from the perspective of the child and the fourth movement takes the parent/guardian/outsider's perspective. *Language* starts in the early morning when a beeping alarm clock is silenced with a groan. The parent walks in and tries to rouse the child (Alex) out of bed. Alex responds, attempting to repeat the parent's good-morning greeting. After failing to resolve the misunderstanding, Alex uses their self-stimulatory behavior (aka stimming) to calm themselves. In *Social*, Alex is playing by themselves at recess when some other Students go over and invite Alex to join their game. Alex initially ignores them, but eventually decides to try. Alex misunderstands the other children's social cues and runs off stimming in frustration. In *Behavior*, the parent breaks their usual routine and takes Alex to the grocery store on the way home. This change, as well as the overwhelming amount of sensory input surrounding them, leads Alex to a sensory overload meltdown. We hear the familiar tune of stimming again, but it doesn't seem to calm them as well as it did earlier. In *Perspective*, the surrounding adults reflect upon the day. They come to the idea that it might be Autism Spectrum Disorder and resolve to work together to help Alex.

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Artist's Summary

Autism Spectrum Disorder General Information

The International Classification of Diseases (ICD-10) defines autism as “A pervasive developmental disorder defined by the presence of abnormal and/or impaired development that is manifest before the age of 3 years, and by the characteristic type of abnormal functioning in all three areas of social interaction, communication, and restricted, repetitive behaviour” (World Health Organization, 1992) (Matson, 2016). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) classifies autism as a spectrum disorder, while the ICD-10 assigns different subsections to autism. The DSM-5 definition is used to diagnose Autism Spectrum Disorder (ASD) in the United States. The ICD-10 is used to classify diseases for research around the world. Having these definitions not match means that a person in the US could have a different diagnosis depending on which manual their diagnosing clinician uses. This also makes it harder to make comparisons to other research around the world.

They agree on the onset of symptoms in early childhood, and express that the symptoms cause clinically significant impairment that are not better explained by another condition and are judged against the norms for their culture, gender, and age (American Psychiatric Association, 2013). Many people diagnosed with autism are males, and one theory suggests that “when a girl has autism she would probably have more severe cognitive impairment, and this pattern has been noted” (Volkmar, 2003). Girls who are not intellectually or linguistically impaired may go undiagnosed and have difficulties that are harder to recognize (American Psychiatric Association, 2013). With that in mind I felt

that it would be biased to write with one gender in mind, so I wrote the piece with a gender-neutral child in mind. This meant that I could not be too specific with the symptoms portrayed in the behavioral movement. The name, Alex, was the first gender neutral name I could come up with to clarify the maze of gender neutral language throughout the summary and was decided upon after the piece was complete (if the name brings a certain gender or type of person to mind, then please ignore it when you listen to the music).

Individuals with ASD can “have a preference for, and superiority in, processing of local rather than global sensory-perceptual features” which is thought to be the cause of unusual sensitivities (hyper- or hypo-) to sensory information (Lai, 2014) (Rooks-Ellis, 2015) (American Psychiatric Association, 2013). Behavioral symptoms include: repetitive motor movements (aka self-stimulatory behavior or stimming), resistance to changes in routines, restricted interests, unusual use of objects, and difficulty focusing in busy/loud areas (Rooks-Ellis, 2015) (American Psychiatric Association, 2013). Social symptoms include: lack of response to ‘others’ social interactions/invitations, failure to respond to their name, limited eye contact, inability to communicate properly for their age, difficulty understanding emotions, difficulty understanding others verbal/non-verbal cues, and may prefer to play alone (Rooks-Ellis, 2015). Language deficits include “poor synchrony and lack of reciprocity in conversational interchange; poor flexibility in language expression and a relative lack of creativity and fantasy in thought processes;” (World Health Organization, 1992). People with autism can also have a lack or absence of joint attention, the ability to split attention between multiple people or things (Keen, 2016). It is estimated that “between 50 and 100% of individuals with ASD have motor

difficulties including incoordination during gross and fine motor activities, poor balance skills, and clumsy gait patterns” (Srinivasan, 2015). It is possible to have someone with autism display skills in a specific area like music, art, or math and are known as autistic savants (Feinstein, 2010). There are also “common comorbid problems such as anxiety, depression, sleep disorders, and difficulties with executive functioning” (Fatemi, 2015).

Causes of Autism Spectrum Disorder (ASD) have been debated for years, but current theories suggest that there is “strong evidence for... complex genetic factors comprised of different forms of genetic variation (or architecture)” in ASD, and has a strong genetic basis (Devlin, 2012) (Volkmar, 2014). “Parents consider themselves experts on their own children” however, and some blamed vaccines for their child’s diagnosis (Pitney, 2015). Previous theories have been brought forth by false science and scientists. Bruno Bettelheim used fake credentials to operate as a child psychologist insisting “that cold, emotionless mothers could provoke an autistic response in their children...claiming that he could effectively treat them using the psychoanalytic methods” (Jack, 2014). Soon after his death former students and colleagues accused him of falsifying his credentials, plagiarism, child abuse, and violence (Gottlieb, 2003). Andrew Wakefield and 12 colleagues published a study linking autism with the MMR vaccine, but has since lost his medical license, had the study retracted, and the results have since been unfounded (Jack, 2014) (Rao, 2011). The paper was retracted in February 2010, they were found “guilty of deliberate fraud (they picked and chose data that suited their case; they falsified facts)”, and supposedly for financial gain (Rao, 2011).

There are many studies focusing on the various causes and brain organization. One states that “unusual patterns of brain organization involving ‘local overconnectivity and long-range underconnectivity’... [might signal] an increased risk for ASD” (Deisinger, 2015). Music was found to be valuable in improving mood, personal integration, and social integration for people with ASD (Allen, 2009). Finally, most research is centered around children, and “many older adults lack a formal diagnosis” due to a change in definitions over time (Wright, 2016). This leaves some people without services, and influenced what age range I could portray the person with autism to be. Without information on adults with autism, I could not accurately write a piece from a person with autism’s perspective.

Language

From the beginning to measure 15.2 (measure number.beat) is a simple melody and arpeggiated chords in the piano and flute. The light, quiet, and simple nature of this section is meant to evoke the image of nighttime before anyone is awake. From 15.2-18.2 is a traditional yet thick voicing of a Neapolitan sixth chord. This is representative of an alarm clock going off, with the note in the tenor saxophone in 18.3 being a hit to the snooze button. The back and forth between the alto saxophone and the tuba at A is a dialogue between the parent attempting to wake the child up and the child trying to repeat the parent. At B, the alto saxophone takes off with a lively aba melody (the first section is repeated(a) after the second section (b) is finished). The melody is heard in a slower, slurred version in the relative minor at C from the trombone. This represents the child’s response and symbolizes some form of a language impairment or unusual use of language

(American Psychiatric Association, 2013). At D, the alto and tenor saxophone and piano play the a and b sections of the melody at A simultaneously in a counterpoint format. This is done again at E for the second version, continuing the conversation between the parent and child. At F, the tenor and alto saxophones trade off playing these melodic phrases. These, through speeding up and shortening the rhythms, eventually transform into representations of the frustration motif that is played in its first form from 103.4-end. The frustration motif is a musical representation of self-stimulatory behavior (stimming) that is some form of repetitive motor movement like flapping arms, clapping, or rocking (American Psychiatric Association, 2013).

Social

From the beginning to measure 16, the tenor saxophone has the first melody in this movement while the trombone and piano have a bass line and piano accompaniment. This melody represents the child with autism playing by themselves. This is contrasted at measure 20 with a swing tune that is heard in three pieces, played one at a time, from the alto saxophone, tenor saxophone, and trombone until measure 35. This section represents the other children on the playground inviting Alex to join in their game. The one measure syncopation in the tenor and alto saxophones at measure 18 and 19 represents two children inviting Alex to join their game. Rehearsal marker B is Alex's response, it is basically unchanged from the first iteration of the first melody in this movement. This represents the lack of response to social invitations or interactions (Rooks-Ellis, 2015). At rehearsal mark C the children decide to ask again, but unlike the first time they ask in

pairs or as a group. This is represented by the saxophones, trombone, and tuba. This is presented in different combinations of the alto saxophone, tenor saxophone, and trombone playing the primary melody in unison or octaves. At rehearsal mark D the tenor saxophone has a new melody that is a combination of the two melodies so far in a straight fashion while the other instruments play accompaniment. This shows that Alex trying to play along with the other children but Alex isn't reading all of the social cues correctly while the other children are trying to support him/her (Rooks-Ellis, 2015). At 75 the alto saxophone plays a variation of what the tenor was playing to simulate one of the children trying to bridge the gap between Alex and the other children. At 81.3 the tenor saxophone plays a loud note simulating a cry out of frustration. This leads into rehearsal mark E where the tenor saxophone has a run of sixteenth notes, symbolizing running away from the situation. This goes into a section of the frustration motif being repeated in different octaves and a full playing of the frustration motif at measure 88 that represents a stimming behavior (American Psychiatric Association, 2013). It ends in a melodic, augmented variation of the frustration motif as a tenor saxophone solo representing the child calming themselves down.

Behavior

Beginning in measure 8, block chords in the piano function as a chaconne throughout the remainder of the movement. This repetitive bass line and chord progression serve as a unifying element throughout the movement. This is altered slightly in the 2 measures before each rehearsal mark except A to lead the ear into a key change.

The key of this piece starts in c minor and ends in b minor to symbolize the child getting more and more uncomfortable with the situation. This is to represent an uncomfortable change in routine (Rooks-Ellis, 2015). I chose those keys so that this movement picks up where the last one left off, shifts keys to add unease, and doesn't make it too hard for the players to read. Above the chaconne there is melodic content from the alto saxophone, tenor saxophone, trombone, and tuba. In the first 7 measures, there are four short melody fragments played individually: a friendly greeting (ms. 1-2), an infant cry (ms. 3), a mother hushing said infant (ms. 4-5), and a heavysset person walking around (ms. 6-7) (being played by the tuba it comes across heavy and makes use of the bass heavy instrumentation). These four fragments and variations on the frustration motif are what you hear for melodic content from the beginning to measure 77. It was written to sound unpredictable, overstimulating, and having a difficult time focusing in busy/loud areas (Rooks-Ellis, 2015). The changes in time signatures and quick dynamic changes add to that feeling. At E the frustration motif comes back in its full form and is then repeated with the last two measures of the chain going up in pitch instead of down. The last two measures feature a C major chord in first inversion moving to a b minor chord in a way that is unsatisfying to the ear both harmonically and rhythmically.

Perspective

Unlike the first three movements, this one is written from the perspective of someone other than the child (parent, guardian, teacher, etc.) who is thinking about the child's activity throughout the day. From the beginning of the movement to rehearsal

mark A, there are variations of the frustration motif. At A, the thematic material from the first movement is heard again from the wind instruments overlapping each other. At B, themes from the second movement are heard in the same style as at A, with a motif from the third movement at 24.3. The repeat of the motif from the second movement is meant to be coming from a teacher who witnessed the interaction on the playground and is informing the parents. The arpeggiated chords moving up and down in the treble clef piano part suggest a circular motion, commonly associated with gears turning in their head or the human thought process. When they stop at measure 27 it transitions from actively thinking about what is going on with the child to the idea that it is ASD. The chorale-style at measure 28 in the 4 upper voices (saxophones, trombone, and tuba) in harmony with the piano accompaniment is symbolic of cooperation and harmony amongst everyone involved to do what is best for the child. The melodic fragments in measures 36-37 suggest each adult is offering an idea to help. The 4-3 suspension between measures 38 and 39 add a suspenseful and satisfying ending to the entire piece. In this resolution, the tenor saxophone moves to the third of the chord as expected. The trombone should resolve the same way, but instead moves to the fifth of the chord. This is significant in that it is different than the sound expected from this type of resolution but is still a satisfying ending.

Rehearsal and Recording Process

Of the musicians that were selected to record this project, two were faculty in the music department. These two would not need as much time in rehearsals as the other

three, who were either music majors or involved in performance groups on campus. I then decided to rehearse with the three students for one hour every week. The students would need more time to learn the piece than a faculty member, and having a rehearsal provides that time. I had the faculty musicians join the rehearsals the week before we went to the recording sessions so they could hear what it would sound like.

During the weekly rehearsals, I would pick a section from the third movement to work on, since it proved to be the most difficult in the entire piece. Musicians are trained to listen to the sounds around them for harmony, balance, tempo, and other various musical cues to stay together. Since I wrote it to be unpredictable it meant that the musical cues they would normally listen for were not present and threw the performers off. The other three movements did not require as much technical work, time in rehearsals on them was spent refining musical elements. Balance, dynamics, and minor rhythmic issues like syncopation or swing versus straight rhythms were all clarified during the rehearsal process. The group rehearsals toward the end went well, ironing out minor issues for the best possible result at the recording sessions.

With the way scheduling worked out I had to record the pianist one day, and the other four performers (saxophones, trombone, and tuba) the next. We had the pianist's playing in the musician's headphones throughout the process with a click track setting the tempo. Doing that helped the group stay together, and the recording session went well. If I could do it over I would have had all the performers at one recording session because it limited what I could do musically with the tempo. Another problem that arose was that the trombone player was not performing the music at the same level as the other

musicians throughout. I assisted them throughout the process however I could, and they made remarkable progress throughout. I went over parts in the music in rehearsal for notes or correct rhythms, spent time helping them practice (outside of rehearsal), and paired them with one of the other performers to practice together (outside of rehearsal). I essentially used different rehearsal techniques I have learned, all of which helped.

When it came down to it I thought that they were close enough to make it work and it would be more difficult to find a replacement. This showed in the recording process with results on that one part sounding not as polished as the rest of the ensemble. Overall though, the idea of writing and recording a new piece in a year is an ambitious goal, and one that I am happy to have accomplished.

Limitations

There are things that I cannot cover in the scope of a four-movement musical piece, it was impossible to cover every possible permutation of manifestations of autism. The saying goes that if you know one person with autism you know one person with autism, and it is hard to adequately sum up a complex spectrum of a disorder in roughly 15 minutes of music. Knowing that, I did not try to cover every end of the spectrum. What I attempted to do was to sum up every category of symptoms from a child with autism's perspective (World Health Organization, 1992).

I acknowledge that I am not a certified expert on the subject and have probably approached it in a different way than an expert would. If I were to do this project again I would find one person with ASD and work with them to write about their specific

experiences. I might even pick a few people with ASD and make a series of movements out of their experiences. In addition, this is an interpretation of ASD in general put into music. This is not meant to be an authoritative resource or new research, but merely an aid in understanding to supplement informational material that is already available.

Score

Autism: A Song of Understanding

Hannah Babcock

I - Language

Alto Saxophone

Tenor Saxophone

Trombone

Tuba

Piano

Dream-like 2 3 4 5 (Flute) 6 7 8

p

The musical score is for a piece titled "Autism: A Song of Understanding" by Hannah Babcock, specifically the section "I - Language". It is written for a five-piece ensemble: Alto Saxophone, Tenor Saxophone, Trombone, Tuba, and Piano. The music is in 4/4 time and B-flat major. The Alto Saxophone part features a melodic line starting at measure 5, marked with a piano (*p*) dynamic and the instruction "Dream-like". The Piano part provides a harmonic accompaniment, also marked *p*. The Tenor Saxophone, Trombone, and Tuba parts are mostly rests, with the Tenor Saxophone having a single note at measure 5. The score includes measure numbers 1 through 8, with a "Flute" part indicated at measure 5. The Alto Saxophone part has a melodic line starting at measure 5, marked *p* and "Dream-like". The Piano part has a harmonic accompaniment, also marked *p*. The Tenor Saxophone, Trombone, and Tuba parts are mostly rests.

9 10 11 12 13 Alto Sax

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

20 21 22 23 24 25

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

B 26 27 28 29 30 31

$\text{♩} = 120$

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

32 33 34 35 36 37

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

38 39 40 41 42 43 44

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

C

$\text{♩} = 80$

Groggy

mf

45 46 47 48 49 50

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

D $\text{♩} = 120$
Cheerful, bright

51 52 53 54 55

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

56 57 58 59 60

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

61 62 63 Groggy 64 65

E ♩ = 90

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

mp

mp

mp

66 67 68 69

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

70 71 72 73

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

F

74 75 Confused 76 77 78

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

79 80 81 82 With anxiety 83

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

84 85 86 87 88

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

89 90 91 92 93

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

with increasing tension

95 $\text{♩} = 100$

94 95 96 97

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

98 99 100 101

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

102 103 104 105

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

ff

106 107 108 109

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

rit.

II - Social

$\text{♩} = 100$
Lighthearted 2 3 4

Alto Saxophone

Tenor Saxophone *f*

Trombone *mp*

Tuba

Piano *mf*

5 6 7 8 3 9

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

23

10 11 12 13 14

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

15 16 17 18 Relaxed 19 20

Swing A

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

p *mf* *mp*

21 22 23 24 25 26

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

27 28 29 30 31 32 33

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

f

8

45 46 47 48 49

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

50 51 52 53 54

C Swing

Playful

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

f

sfz *f*

sfz *mf*

55 56 57 58 59

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

60 61 62 63 64

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

D Straight

65 66 67 68 69 Un sure

A. Sax. *p*

T. Sax. *mf*

Tbn. *p*

Tba. *p*

Pno. *p*

70 71 72 73 74

A. Sax.

T. Sax. *f*

Tbn.

Tba.

Pno.

75 76 77 78

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

p

mf

79 80 81 82

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

ff

f

E Distressed

Solo

83 84 85

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

f

f

f

f

86 87 88

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

Solo

8

89 90 91 92 93

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

rit.

Freely

94 95 96 97 98 99 100

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

III - Behavior

♩ = 90
Unpredictable 2 3 4 5 6 7

Alto Saxophone *mf*

Tenor Saxophone *mf*

Trombone *mf*

Tuba *mf*

Piano

8 **A** 9 10 11 12 13

A. Sax. *ff* *mf*

T. Sax. *ff* *mf*

Tbn. *ff* *mf*

Tba. *ff*

Pno. *mp*

mp

14 15 16 17 18 19

A. Sax.

T. Sax.

Tbn.

Tba.

mf

Pno.

20 21 22 23

A. Sax.

T. Sax.

Tbn.

Tba.

ff *mf*

ff *mf*

ff *mf*

ff

Pno.

24 25 **B** 26 27 28

A. Sax.

T. Sax.

Tbn.

Tba.

mf

Pno.

29 30 31 32

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

33 34 35 36

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

37 38 39 40 41 42

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

43 44 **C** 45 46 47

A. Sax. *mf*

T. Sax. *mf*

Tbn. *mf*

Tba. *mf*

Pno.

48 49 50 51 52

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

53 54 55 56 57

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

58 59 60 61 62

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

D Increasing tension

f *mf*

f *mf*

f *mf*

f *mf*

63 64 65 66

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

ff *mf*

ff *mf*

ff *mf*

ff *mf*

ff

67 68 69 70

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

71 72 73 74

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

f *mf* *f* *mf* *f* *f* *mf* *mf*

75 76

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

ff *ff* *ff* *ff*

77 **E** Overstimulated 78

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

79 80

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

81 82

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

83 84 85 Unresolved tension 86

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

IV - Perspective

The musical score for "Contemplative" is written for five instruments: Alto Saxophone, Tenor Saxophone, Trombone, Tuba, and Piano. The tempo is marked as $\text{♩} = 70$. The key signature has one sharp (F#) and the time signature is 4/4. The score is divided into four measures, numbered 1 through 4. The Alto Saxophone part begins in measure 3 with a melodic line marked *p*. The Tenor Saxophone part begins in measure 1 with a melodic line marked *p*. The Trombone part begins in measure 1 with a melodic line marked *p*, and in measure 4 with a melodic line marked *mf*. The Tuba part begins in measure 3 with a melodic line marked *p*, and in measure 4 with a melodic line marked *mf*. The Piano part begins in measure 1 with a melodic line marked *p*. The score concludes with a double bar line and repeat signs at the end of measure 4.

5 6 7 8 9

A. Sax. *mp*

T. Sax.

Tbn. *p*

Tba. *p*

Pno.

A

10 11 12 13 14

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

mf *p* *mf* *p*

mf *p* *mf* *p*

mf *p* *mf* *p*

mf

15 16 17 18

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

mf *p*

mf *p* *mf* *p*

p

B

19 20 21

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

mf

22 23 24

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

p

mf

p

C Understanding and Cooperative

25 26 27 28 29

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

p *mf* *f* *mf* *mf*

30 31 32 33 34 35

A. Sax.

T. Sax.

Tbn.

Tba.

Pno.

36 37 38 39

A. Sax. *f* *f*

T. Sax. *f* *mp* *f*

Tbn. *f* *mp* *mf*

Tba. *f* *mp* *f*

Pno. *f*

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Author's Biography

Hannah M. Babcock was born on April 10, 1995 in Rockport, Maine. She was raised in various places across the country before finally settling in Washington, Maine, and graduated from Medomak Valley High School in 2013. Majoring in music education, Hannah has an instrumental concentration on her primary instrument, the flute. She has received an Undergraduate Research and Creative Activity Fellowship from the College of Liberal Arts and Sciences, as well as Deans List and Presidential Scholar Awards.

Upon graduation, Hannah plans to teach in the public-school system. She will eventually return for advanced study in music or the interconnectedness between disabilities (like autism) and music.