

MICROANALYSIS OF A MUSIC THERAPY SESSION SEGMENT WITH AN AUTISTIC CHILD

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SUMMARY. The following microanalysis helps analyze an essential aspect of a music therapy session with a child diagnosed with autism. This detailed analysis highlights how essential music is in this little girl's life, both in expression and communication. Microanalysis in music therapy aims to critically analyze the therapy process, focusing even on the smallest elements from a musical and therapeutic view.⁴

The music therapy sessions with this client and the analysis are based on the theory of communicative musicality developed by Trevarthen and Malloch.⁵ Just as Malloch⁶ argues that communicative musicality between mother and infant has three essential parts - pulse, timbre, and narrative - so it is observed that the analyses of the segments chosen were based on these principles. The narrative of the musical interaction between the client and therapist points to the fact that it expresses innate motives for sharing emotion and experience with other people and creating meaning in shared activity. It allows two people to share a sense of passing time and to create and share the emotional framework that evolves through this shared time.

Keywords: Music therapy, autism, communicative musicality, microanalysis, attunement, psychology.

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⁴ Wosch, Thomas, and Tony Wigram. *Microanalysis in music therapy methods, techniques and applications for clinicians, researchers, educators and students*. Jessica Kingsley Publishers, 2007, pp. 13–28.

⁵ Malloch, Stephen, and Colwyn Trevarthen. *Communicative musicality exploring the basis of human companionship*. Oxford University Press, 2009.

⁶ Malloch, Stephen. "Mothers and infants and communicative musicality". In *Musicae Scientiae*, vol. 3, nr. 1., 1999, pp. 29-57.



Introduction

Microanalysis is a method of analyzing and documenting the music therapy process⁷. This therapeutic tool can provide significant insight and a means of assessing the relationship between the client and the therapist, as well as a means of assessing the therapeutic process.⁸

This research highlights the analysis of an essential part of a therapeutic process with a 6-year-old child that we will call Bird.⁹ We chose this pseudonym because it fits the client. Like a bird, the client flies away if she feels scared; however, she will come close if she feels safe. Also, just as each bird species has its unique song and form of communication, this client has a unique way of communicating, which was necessary to learn to establish a connection. Furthermore, the idea of birds and the sky appeared to bring a feeling of peace and joy to the client.

Bird was diagnosed with autism and has displayed a delayed psychological development. Upon first meeting Bird, she remained distant and avoided eye contact, rarely responding to questions, and often remaining nonverbal. She gave the impression of lacking a true sense of self. Her parents chose to pursue music therapy sessions in the hope that it would give her more opportunities to express herself, make connections, and develop her communication skills.

As a result, the principal aims of the music therapy sessions were to establish a form of communication and to foster a sense of safety and acceptance.

About the sessions

In this section, we draw on the idea of affect attunement as conceived by Daniel Stern, where the therapist attunes to the gestures, sounds and moods expressed by the client through their own music and body posture.¹⁰ Another important theoretical basis that helps frame the music therapy sessions with Bird is Communicative musicality, which explains the intrinsic musical nature of human interaction.¹¹

⁷ Wigram, T., & Wosch, T. *Microanalysis in music therapy methods, techniques and applications for clinicians, researchers, educators and students*. Jessica Kingsley Publishers, 2007, pp. 298-316.

⁸ Ibidem.

⁹ We have changed any identifying elements in this study to protect the client's identity.

¹⁰ Stern, Daniel N. "Affect attunement". In *Frontiers of infant psychiatry*. vol 2, 1985.

¹¹ Malloch, S., and Trevarthen, C. Op. cit.

Over 20 weeks, Bird benefitted from 11 music therapy sessions. During the first session, Bird showed great interest in music for the piano since it was the only available instrument in the room. As the therapist introduced more instruments during the sessions, Bird showed greater interest in the ukulele, which she called the 'little guitar'. Another essential aspect during the first session was that Bird noticed a painting palette in the room and asked if she could paint. Painting became an essential part of the music therapy sessions and something that Bird looked forward to. After a few sessions, the music therapy sessions started forming a predictable pattern, such as focusing on instruments like the ukulele and piano. After spending some time on the instruments, the therapist and Bird would continue with watercolor painting. Sometimes, Bird would accept to return to instruments after painting. Some sessions included improvisational playing, and she often asked the therapist to sing specific songs accompanied by the ukulele, the guitar, or together on the piano.

One of the challenges of the work was to develop a connection and a means of communicating with the client. Based on early observations and the observations of her family, Bird can be considered pre-verbal. However, she was primarily nonverbal in her interactions with the music therapist. She noticed and mentioned several things *to herself*, often telling herself stories and immediately mentioning whatever came to her mind. She rarely answered direct questions, but she always expressed her wishes. Regarding attachment, she appeared to display an avoidant attachment type.¹² Despite the challenge of communicating verbally with Bird, there were a few moments during the music therapy sessions in which there was a significant connection. For example, during the third session, she started singing with the therapist and mirroring the therapist's guitar play on the ukulele. This was an example of musical attunement between the therapist and the client.

The microanalysis segment

The chosen segment for this microanalysis is from a music therapy session that took place two months after starting the therapeutic process. It is based on a video recording from the seventh music therapy session. This segment marks a significant moment of the therapeutic relationship and is therefore the reason for which it was chosen for closer analysis. Firstly, because it was the first time that this kind of musical expression and improvisational

¹² Bowlby, John. "The Bowlby-Ainsworth attachment theory." In *Behavioral and Brain Sciences* 2, no. 4, 1979, pp. 637-638.

communication took place. Secondly, there was a level of response and participation from the client that had never been seen before.

The seventh session started with painting, an activity that Bird had yet to finish in the previous session and was keen to continue. The therapist joined the client in this painting activity. Usually, during the art moments, the therapist would put on soothing classical music that they listened to quietly while painting with watercolors. However, in this session, the therapist made an unplanned change because she did not use recorded music while painting which is a way of working with music 'receptively'. Instead, she started actively singing and improvising about what they were painting, or other aspects related to their activity. The therapeutic aim of this change was to encourage Bird to improvise whatever she wished or felt comfortable sharing musically. This change appeared to immediately appeal to Bird, as she started responding musically to the therapist's singing, thus starting a sing-song conversation.

During the chosen segment for this microanalysis, there was a significant deepening in the therapeutic relationship that continued in the following sessions, especially during the improvisational singing moments.

The following analyzed examples come from the second half of the session, which lasted 17 minutes and highlighted the improvisational interaction between Bird and the client. There is a half-minute section at the beginning when Bird responds for the first time by singing/chanting. This is followed by a more extended section in the middle of the session, and finally, in the end, we can observe that her responses appear to be fully developed.

Microanalysis of the musical communication between the therapist and the client

We have divided Bird's answers into two types:





















- A concrete, direct response to the therapist, marked with a blue star.
- Indirect responses, where the client either continues the therapist's singing themes or continues singing, but on other subjects. In these moments, there are alternating mirroring moments in which the client sometimes leads, and other times, the therapist leads. It seems like a musical play or like throwing a musical ball at each other. These types of responses are predominant in the analyzed sections¹³.

¹³ Our musical interactions were in Hungarian.

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The following figure represents the graphic legend detailing nonverbal cues:

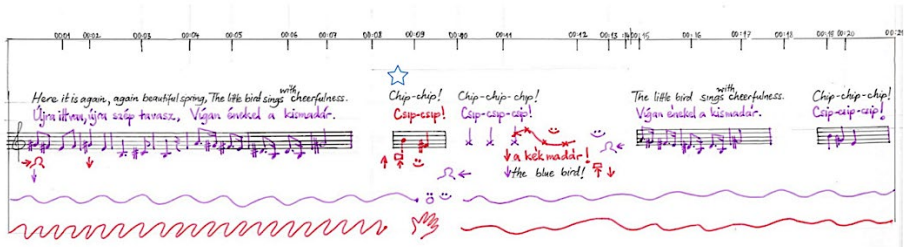
Figure 1

| | | | | | |
|--|---------------------------|--|--|---|---------------------------------------|
|  | CLIENT SINGS |  | CLIENT LOOKS UP |  | CLIENT PAINTS/WORKS WITH HER HANDS |
|  | THERAPIST SINGS |  | THERAPIST LOOKS UP |  | THERAPIST PAINTS/WORKS WITH HER HANDS |
|  | CLIENT TALKS |  | CLIENT LOOKS AT THE CAMERA |  | THERAPIST LOOKS SURPRISED/AMAZED |
|  | THERAPIST TALKS |  | THERAPIST LOOKS AT THE CAMERA |  | DIRECT RESPONSE FROM THE CLIENT |
|  | CLIENT LOOKS DOWN |  | CLIENT LOOKS AT THE THERAPIST/HER WORK | | |
|  | THERAPIST LOOKS DOWN |  | THERAPIST LOOKS AT THE CLIENT/HER WORK | | |
|  | CLIENT'S HAND GESTURES |  | CLIENT SMILES SMALL/BIG | | |
|  | THERAPIST'S HAND GESTURES |  | THERAPIST SMILES SMALL/BIG | | |

Legend

First segment (21 seconds)

Figure 2



The graphic score of the first segment

This introductory short excerpt contains the first moment when the therapist received a concrete answer from Bird. The response seemed fully aligned with what the therapist was saying, indicating that the client was paying attention and comprehending the meaning of the improvised song. The song's theme was spring, and the first line that the therapist sang (in E major) had the following words: "Here it is again, again, beautiful spring, The little bird sings with cheerfulness."

As the video recording of this session shows, the client started painting with sudden, fast, nervous movements. As soon as the therapist started singing about the bird, the client stopped painting, raised her head, and looked into the camera that was recording the session. She smiled, gestured with her hands, and emulated the little bird's voice: "Chip-chip"¹⁴, staying in tune (b-f#).

The therapist immediately responded to this, whispering - "chip-chip-chip," while Bird continued to add her thoughts, "The bluebird!". Perhaps the thought of the little bird reminded her of something else, which included a bluebird. The song did not specify the bird's color, so this was the client's contribution. This interaction is an example of 'affect attunement', as the therapist imitated the feeling of the rhythm and words, although slightly softer so as to empower Bird to sing more. 'The little bird sings with cheerfulness' indicates the therapist's attunement to the feeling of Bird's verbal expression.

The therapist then repeated the line "the little bird sings with cheerfulness" and then finished with the "chip-chip" to connect both elements of the interaction. During these moments, the therapist tried to connect with what Bird was doing and saying and wanted to encourage her to develop her ideas and thoughts further. Interestingly, the client's painting movements became calmer and more subtle as musical communication developed. Another significant aspect is that the connection between the therapist and Bird did not include eye contact. However, Bird's eye movements change during these moments, as she looks up from her work and sometimes looks over at the therapist's artwork. To the therapist, this connection through art and music felt equivalent to eye contact.

¹⁴ The English version would be "tweet-tweet."

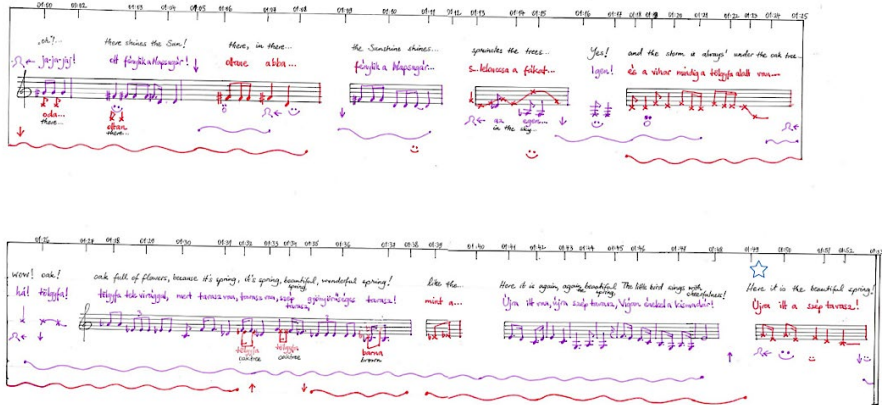
Second segment (1 minute, 53 seconds)

Figure 3



The graphic score of the second segment, 1/2

Figure 4



The graphic score of the second segment, 2/2

This section marks the development of this musical communication in which the therapist continues with the sing-song conversation, and Bird responds. Since this section is more complex than the previous one, we have

divided it into three categories of analysis: from a thematic point of view, from a musical perspective, and from an affect attunement point of view.

Reflection from a thematic point of view:

During these moments of musical communication, specific themes unfold sequentially: Sky - Sun - Trees - Oak - Spring. The subject that opened up these themes is the color blue. The therapist responded musically to Bird's humming, saying, "Hm, how nice is your sky, hm, how blue it is..." The reason for which the therapist chose these words is that colors are one of the client's favorite subjects. Bird responded in the same tune, "Yellow is the Sun..." followed by "There is no yellow." This last sentence could have referenced the fact that she was running out of the color yellow while painting. The therapist continued the dialogue by singing about the sun shining outside during the day but not at night. Bird responded to these words by saying, "No, it shines..."

After this interaction, Bird interrupted the musical dialogue but took the melodic world further. She exclaimed musically, "O, ne, jajajaj," which could have reflected many things: storytelling, unspoken emotions, and many thoughts. In essence, this musical connection was not about the message but rather the excitement of the storytelling, the transcendence, and this immersion in the chanting game. The therapist started smiling widely at this point as a unique harmonization occurred. The therapist responded in an echo: "jajajaj!" "The sun is shining there!"

After the first minute, Bird continued singing, "Storm is always under the oak tree," while she was painting trees. The therapist looked at her artwork and circled back to the idea of spring and then the song about spring. Finally, Bird responded, "Here it is again, beautiful spring!"

Reflection from a musical point of view:

In general, the therapist's melody line resembles a singable tune with simple intervals and rhythm. In reflection, the melody seems to be inspired by children's folklore. As soon as the therapists started singing a minor or major third, Bird responded by mirroring the tune immediately.

At the beginning: D flat major

00:39: C major

00:55 D major

01:27 D flat and C between

01:41 C major

These keys can only be detected with relative accuracy and stability, as they are often altered by the speech forms between speaking and singing. Thanks to Bird's good musical ear, the melodic world remained fluid.

Reflection from Daniel Stern's affect attunement point of view:¹⁵

Daniel Stern's theory of affect attunement highlights the special interaction between infants and their caregivers. The basis of attunement is not just imitation or mirroring but also reading and mapping each other and continually encouraging the infant's expressions by responding to them so that the infant can read them (Stern, 2018). The word 'attunement' has a musical connotation, which is why this connection is essential to music therapy. Music is a substitute for words and the best means for unspoken feelings and self-expression. The affect attunement can be precisely defined in time, intensity, and form. It can be a longer or shorter interaction, a very obvious or a more subtle manifestation, and it can be manifested in movement, vocal expression, and facial expression. These are precious and essential moments, regardless of the child's condition. Their essence impacts all subsequent interactions, relationships, and self-expression.

As the legend indicates, we have used blue stars to indicate moments of attunement, but Bird's musicality and playfulness often stand out in these segments. Her hand gestures and facial expressions (the smile) also appear to indicate when she behaves in highly attentive ways towards the therapist.

The following key moments are graded according to how much Bird had been engaging with the play and reflect how much she appeared to listen to the therapist's intonation and what she was saying:

- 00:10 -00:17 "The Sun is yellow..."
- 00:49 - 00:58 "oh, jajajajaj!"
- 01:49-01:53 "Here it is again, beautiful spring!"

¹⁵ Stern, Daniel. *The interpersonal world of the infant: a view from psychoanalysis and developmental psychology*. Routledge, 2018.

Third part (1 minute, 39 seconds)

Figure 5

The graphic score of the third segment, 1/2

Figure 6

The graphic score of the third segment, 2/2

Reflection from a thematic point of view:

This last excerpt is taken from the end of the session and reflects how Bird's musical play has developed. In this part, the changing world of colors, which appears to be her favorite, becomes the central theme.

As the therapist painted a rainbow, she also began singing about it. Bird answered in the same tone and voice movement, explaining that she was painting with purple. "I add red, then blue, dark blue..., then grey..." From the 39th second, there is a back-and-forth singing:

Bird: grey...
Therapist: Grey...
Bird: pink...
Therapist: Yellow, yellow...
Bird: pink...

At one point, the therapist noticed Bird struggling to clean up the pink paint, so she reached out to help. The client would rarely tolerate such a gesture in the past, but at that particular time, she seemed comfortable receiving help and singing: "A pink rainbow...".

The therapist invited Bird to look at her drawing: "Look here." However, Bird is preoccupied with her rainbow: "The rainbow has turned brown..." Furthermore, she continued to sing. Then, at the very end, the therapist mentioned that the rain had gone (referring to the meaning of the rainbow), and at last, at the very end of the session, Bird responded to the therapist's invitation and finally looked at her drawing.

It almost seemed that they "painted each other with colors." This back-and-forth singing was more flexible, and clearly, Bird enjoyed it.

Reflection from a musical point of view:

The singing consisted of simple motifs, with simple rhythms derived from songs, in a rubato tempo, which also applies to the previous parts.

00:01: B major
00:39 E flat major
00:56 B flat major
01:06 E major.

The descending minor and major thirds appear to be the most useful, and Bird responded to those the most. Bird was constantly using the material that she had heard from the therapist and was processing it. Bird also changes the tonality at 00:39 when announcing "grey", so at 00:45 the therapist modulates at the mention of the color yellow. This back and forth play of tones also reflects the openness and flexibility of the interaction. The alternation of ideas, the appearance of new elements was also expressed musically. Here, moreover, the conversation is about color - a coincidence, but a reminder of the theme of musical synesthesia that has been so often explored.¹⁶

¹⁶ For example, in Christine Elisabeth Bronson's thesis *Making Meaning with Synesthesia: Perception, Aspiration, And Olivier Messiaen'S Reality*, (The Florida State University, 2013) she explores how different artists, like Olivier Messiaen or Wassily Kandinsky, perceived the presence of an artistic and musical synesthesia throughout the history.

Reflection in relation to attunement:

There seemed to be a constant alignment throughout this segment, with Bird frequently communicating and sharing musical material with the therapist.

- 00:08-00:15: ...purple...

- 01:14-01:23 - “The rainbow turned brown...”. At this point, Bird sang: “I am glad you are here,” which may have been a line from a song she already knows. However, the therapist responded to the positive nature of the phrase with a smile and enjoyed the potential implications.

- 01:38 – The session finished with Bird looking at the therapist’s work and appearing interested.

Conclusions and reflections

This kind of “mothering” language that the therapist used and built this whole interaction proved how this musicality deeply has its roots in human interactions. (Trevarthen C., Malloch, S. 2000, p. 4) In Bird’s case, however, the interaction could unfold from the level of “mothering” to a more musically advanced level, where it could occur in more concrete melodic and rhythmic structures. In this session, we can see what Carol M. and Clive Robbins call the “music child” being reached, which helps to unleash the true personality of the “condition child.” He calls the “condition child” someone whose potential has not been released because of developmental or other psychological issues.¹⁷ According to them, it is through musical experiences that a child (whatever his abilities) can develop a new core of individuality.

Another important aspect is that the therapist and client also painted together – they worked with the same physical gestures together. It appeared they connected on multiple levels, both in music and art. This complexity of connection enriched the whole activity. This interaction also relates to the affect attunement that Stern explains.

Through this microanalysis, we have reflected that Bird enjoyed connecting affectively to the therapist, primarily through improvisational singing, and art. We can also observe that singing about colors and elements created a safe environment for Bird, encouraging her to express herself and communicate. The moment she allowed the therapist to help was pivotal in the therapeutic relationship. Through accepting help, Bird invited the therapist into her safe space to join her in play and life. When Bird sang to

¹⁷ Bruscia, Kenneth E. *Case studies in music therapy*. Barcelona Publishers (NH), 2006.

the therapist, "I am glad you are here," she expressed something positive about their relationship. This connecting interaction took the therapeutic relationship to the next level and offered the hope of a fuller and richer community for our future sessions.

REFERENCES

- Bowlby, John. "The bowlby-ainsworth attachment theory." In *Behavioral and Brain Sciences* 2, no. 4, 1979.
- Bronson, Christine Elisabeth. *Making meaning with synesthesia: perception, aspiration, and Olivier Messiaen's reality*. MA Thesis, The Florida State University, 2013.
- Bruscia, Kenneth E. *Case studies in music therapy*. Barcelona Publishers (NH), 2006.
- Papadopoulos, Linda. *Reporting in Counselling and Psychotherapy A Trainee's Guide to Preparing Case Studies and Reports*. Taylor & Francis e-Library, 2014.
- Malloch, Stephen, and Colwyn Trevarthen. *Communicative musicality exploring the basis of human companionship*. Oxford University Press, 2009.
- Malloch, Stephen. "Mothers and infants and communicative musicality". In *Musicae Scientiae*, vol. 3, nr. 1., 1999.
- Stern, Daniel. *The interpersonal world of the infant: a view from psychoanalysis and developmental psychology*. Routledge, 2018.
- Stern, Daniel N. "Affect attunement". In *Frontiers of infant psychiatry*. vol 2, 1985.
- Hodges, A., Donald, "The child musician's brain", In McPherson, Gary E. *The child as musician: a handbook of musical development*. Oxford University Press, 2017.
- Trevarthen, C. and Malloch, S. The Dance of Wellbeing: Defining the Musical Therapeutic Effect. *Nordic Journal of Music Therapy* [online]. 2000, 9 (2). 24 April 2023.
- Wosch, Thomas, and Tony Wigram. *Microanalysis in music therapy methods, techniques and applications for clinicians, researchers, educators and students*. Jessica Kingsley Publishers, 2007.

