## Improving braille music literacy (script)

Tactile Reading Congress 2021 Geert Maessen and Lisanne Aardoom.

(Everything in italic font is not read aloud. The numbers of the PowerPoint slides are integrated in the text as well (e.g. [1]).)

[1] Hello everyone, welcome to our presentation about 'Improving braille music literacy'. I would like to introduce ourselves first. My name is Lisanne Aardoom and since January 2020 I am working as a product manager of tactile images and braille music at Dedicon in the Netherlands. [2] Dedicon is a non-profit organisation which makes existing text and images accessible for people with reading disabilities. At Dedicon I am coordinating all activities related to music.

My colleague, Geert Maessen, is one of our two braille music transcribers. Today he will give this presentation based upon his many years of experience and expertise in the field of braille music. After his presentation I will give you our contact details and ask you some questions to encourage a discussion.

## 1. Braille music: meaning and importance (short)

Hello, I am Geert Maessen. [3] I will begin with a very short introduction into the nature of braille music, then sketch the main problem we encounter in its production and finally propose a general solution for this problem.

Braille music notation is an extension of the braille code which enables the blind to read musical scores with their fingers. It was invented by Louis Braille in the early nineteenth century and developed into an international standard through several conferences since. The latest code has been presented as the "New International Manual Of Braille Music Notation", published in Amsterdam in 1996.

The braille music code provides the means for blind musicians to access the same musical information that is available for sighted readers. All details of a musical score can be included in braille music. For many musicians this is essential in order to perform, analyse and interpret the music of their choice independently.

### 2. The problem

However, there is a problem. [4] Although braille music notation can represent the same information as music notation for the sighted, the differences between the two create a huge educational problem. In general people learn to read musical scores after they learned the alphabet and are able to read texts. This is even more true for the blind.

Music notation for sighted does not use the alphabet, therefore it is possible to learn and read text and music separately. Since braille music makes use of the same braille characters as literary braille, in order to learn braille music it is necessary to have some fluency in literary braille.

There is another important difference. Music notation for the sighted is twodimensional (time is displayed horizontally, and pitch vertically), braille music notation is one-dimensional or linear, just like text.

Because of these two differences, methods to learn these notations differ considerably. Methods to learn music notation for the sighted only presuppose knowledge about music. Methods for braille music, however, presuppose knowledge about music and knowledge about braille. Therefore, most methods for the sighted are not suitable for the blind.

The result of this is an information gap, which in turn has created the misbelieve that braille music is complicated and preferably should be avoided.

# 3. What did we do so far to solve this problem concerning our products and services?

Dedicon is basically a production house for books in adapted formats for users with reading impairments. **[5]** Part of Dedicons service is the transcription of music scores, and music methods, into braille music notation, on request of blind customers. In transcribing several sighted music methods into braille, we often came across the earlier mentioned problem. However, in order to solve the problem we have to cooperate with experts and organisations outside our own organisation. Nevertheless we tried to handle the problem. We translated and transcribed some specific braille methods and some sets of melodies for rehearsal, e.g.:

- Bill McCann, Who is afraid of braille music? This book is an elementary introduction into the musical scale. It teaches the student how to read and write the names of the notes in braille.
- Bettye Krolick, *How to Read Braille Music: An Introduction.* In this book the editor of the New international manual explains the most common items of braille music notation, with references for further study.
- Several childrens songs. These songs were transcribed specifically for the practise of braille reading.

## 4. Threefold approach to the problem

Our efforts so far did not solve the problem. **[6]** Indeed, as a production house we might not be the right institution to do so. However, we know the problem from experience and are eager to contribute to a solution. On that basis, in this paper we propose a general approach to solve the problem. In our view the solution consists in a threefold path to bridge the information gap. First concerning sighted musicians, then concerning braille teachers and thirdly concerning organisations and interest groups.

## 4.1 Knowledge about braille music notation among sighted musicians should be improved.

[7] Most sighted musicians do not even know about the existence of braille music. We think this should change. Every musician should at least know about the existence of braille music notation. Most elementary books with introductions, overviews and histories of music do not mention braille music at all. In order to promote knowledge of braille music this should change. To achieve this, we propose to select common educational music books and add concise paragraphs about braille music notation for inclusion. We also propose a two hour educational course for conservatories, music schools and universities.

#### 1. A list of books to include short braille introductions.

[8] A simple search on my bookshelves brought some titles for books used in conservatories, music schools and universities. Of course, this list can and should be updated and completed. It is simply to get an idea.

• Donald Grout & Claude Palisca, A History of Western Music. 1994; Chapter sixteen, The nineteenth century: Romanticism; Vocal Music pp 613-638:

- Richard Taruskin, Music from the earliest notations to the sixteenth century, *Oxford 2010*,
- Curt Sachs & Otto Hamburg, Our Musical Heritage, A short History of Music, 1955
- Theo Willemze, General music theory, *Utrecht 1979*
- 2. Example of a short introduction (see p. 6).

In each of these books a short paragraph could be included with the very basics of braille music notation. These paragraphs should not exceed the length of one page in these books, and the format, title, font, examples, style etc. should be in agreement with the formats used in these books.

#### 3. A standard two hour introduction to braille music

- [9] Next to adding paragraphs to existing books a course about braille music notation should be designed for sighted musicians, which can be implemented in conservatories, music schools and universities. This course should illustrate the most common items of the New International Manual of Braille Music Notation:
- 1. Notes, rests and octave marks. 2. Clefs, accidentals, key and time signatures.
- 3. Intervals, chords and in-accords. 4. Slurs and ties. 5. Bar lines and repeats. 6. Fingering, ornaments and nuances. 7. Differences between keyboard, vocal, strings, wind, and percussion instruments.

## 4.2 Knowledge about braille music notation among literary braille teachers should be improved.

[10] Our second focus concerns braille teachers. It seems that most braille teachers today are sighted educational professionals that teach children the braille alphabet and how to read texts. However, braille is more, it also includes mathematics, shorthand and music notation. In order to improve knowledge about braille music it would be good to include basics of braille music in the curriculum as early as possible. Since basics of braille music does not require a musical background, but simply knowledge of some simple songs, it should be easy for braille teachers to familiarize with the basics of braille music and learn how to include these in their courses. Since braille music does presuppose knowledge of braille, these basics should be teached starting in the second year of the braille education, when the pupil has some fluency in reading elementary braille texts. [11] For the teacher it would be good enough to sing some simple songs already known to the pupil and show and explain them the

corresponding braille music. In a next stage some songs of the hitparade might be included. Here some examples that can be included in dutch and english courses. It would be good to discuss details with educational experts.

Deze vuist op deze vuist.

[12] Twinkle, twinkle little star.

- 4.3 Strategies to handle the two issues top down, at an organisational level.
- [13] In order to solve the information gap and implement the above two issues, concerning sighted musicians and braille teachers, it is necessary to handle these issues across borders: i.e. institutions, expertises and languages.
- 1. **[14]** The first border is that between braille music and music for the sighted. To cross this border we have to find 1. the right music institutions for the sighted (i.e. schools, institutions, and publishers of music books) and within these 2. the right persons, in order to implement the input sketched above (i.e. explanatory paragraphs and introductory courses, see 4.1). The crucial point here is 3. not to find a single institution or person, but basically to find them all. This is not a simple thing to do very quickly. It really takes time and effort.
- 2. **[15]** The second border to cross is that between literary braille and braille music. In particular we should provide braille teachers with basic knowledge of braille music as sketched above (i.e. simple songs and their braille equivalents, see 4.2). Therefore: 1. We have to find these braille experts. 2. We have to be able to offer them the right knowledge, and. 3. The crucial point here, again, is not to find a single expert, but basically to find them all. Again, this is not a simple thing to do. This will take time and effort.
- 3. **[16]** The third border is between languages (or countries). Each language has its own music books, favorite childrens songs and specific educational peculiarities. Education for the blind, also, is organised differently across the world. Here again it is important to find the right national and local institutions and people (i.e. publishers and schools, *as in 4.3.1*) as well as braille experts (*as in 4.3.2*). The crucial point, again, is not to find a single foreign language

publisher or braille expert, but as much as possible, i.e. basically to find them all. And, of course, this takes a lot of time and effort.

4. [17] The result of the top down handling of these three borders, (i.e. between braille and sighted music, between literary braille and music, and between languages), ideally would be three comprehensive lists. The first list would include the music book titles and its publishers. The contact persons of these publishers. Completed music paragraphs for inclusion in these books. And signed agreements to implement these paragraphs in new books for print. The second list would include educational institutions (conservatories, music schools and universities), contact persons of these institutions, completed introductory courses about braille music to implement in these institutions, and, finally signed agreements to implement these courses in curricula for years to come. The third list would include educational institutions for the blind and their braille experts, elementary braille music examples, elementary braille music tutorials, and signed agreements to teach the braille experts how to implement elementary braille music in their next braille courses.

### 5. Discussion

[18] So far our proposal. In this presentation we have tried to present a plan for a general solution to bridge the information gap causing serious problems in braille music literacy for the blind. The crux of this solution is improving basic knowledge about braille music in the general (musical) public, as well as in the general blind public. The success of this plan, of course, lies in its realization, more specific in the realization of the three lists of agreements.

For some people this plan may seem a bit unrealistic or too ambitious. Others may see the whole idea to improve braille music literacy, simply as wrong or outdated. Others may find it a great idea. We are here to reach out to you and are eager to hear what you think. Any suggestions to improve our approach, or our braille music services, are warmly welcomed. [19] We also formulated five specific questions for you, it would be great if you can send your reaction to us. After these questions I will give you our contact details:

- 1. Do you recognize the problem sketched in this paper? If so, can you be a bit more specific about what you recognize and can you tell us a bit more about if you have any approach for this problem?
- 2. How is braille music educated in your country? In what way, and what kind of materials are used?

- 3. What do you think about implementing paragraphs on braille music in music books for the sighted?
- 4. What do you think about including braille music courses in the curriculum for sighted musicians?
- 5. What do you think about including elementary songs with their braille music notation in braille courses?

Our details are on the congress website and on this slide:

<u>lisanneaardoom@dedicon.nl</u> and <u>geertmaessen@dedicon.nl</u>

Please send us your reaction. If you have any questions or other remarks or ideas about braille music or other accessible forms of music, don't hesitate to contact us. We are looking forward to hear from you. Thank you for your attention.

Lisanne Aardoom & Geert Maessen

Dedion, Traverse 175, Grave, The Netherlands