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Finnish Band Experiences During the Covid-19 Lockdown

John D. Hopkins, July 2020
Chatfield Music Lending Library Newsletter

"How has the Covid-19 lockdown affected bands in Finland?" Jerel Nielsen of the Chatfield Music Lending Library asked in mid-June. "Could you write an article for us?" This is what was written for Chatfield's October 2020 Annual Newsletter.

In the early months of 2020, the rapid international spread of Covid-19 dramatically influenced the institutions of each affected country, including their wind bands. Concerts and festivals were cancelled, rehearsals were prohibited by health-protection restrictions, and doubt was raised about what the future might hold. Band e-mail forums despaired about whether rehearsals and performances could resume even by Christmas 2020, if then. And if they could not, would some bands be able to survive the long disruption?

Yet musicians are resilient and creative. Despite no one fully knowing what is yet to come with Covid-19, or when a return to 'normalcy' might be possible, bands and their players began devising new means to maintain and improve their musicianship despite the lockdown isolation.

Among these was the use of different technological solutions as rehearsal aids. Could bands rehearse remotely? Could there be virtual concerts under a conductor's direction? Several Finnish bands experimented with these questions. A common first step was that conductors created digital playlists, players obtained their parts from the band's online music archive, rehearsed them with guidance from the archive's MP3 or MIDI models, and self-recorded their own parts for each piece. These were then sent to the conductor or band's technician for synchronization and publication as virtual performances, sometimes even live-streamed with the sale of digital tickets.

The next step was testing whether a band could perform remotely under their director, with a full range of musical dynamics. Via such technical experiments, bands have been able to maintain their cohesion and improve their musical skills, revenue has been produced, publicity gained, and new techniques implemented, some of which will still be useful after 'normalcy' returns.

Finland, Finnish Band Music, and the Wind Band Association (SPOL)

There are only 5.5 million Finns, but they are well-educated and technologically adept, with a strong and lively musical tradition. Finland has more than 200 registered wind bands, and countless septets, sextets, quintets, and other groups which perform regularly. There is a new generation of band music composers who have achieved international prominence, and a dynamic 'Finnish Wind Band Association' (*Suomen Puhallinorkesteriliitto*, or SPOL), which supports bands via training seminars, networking support, and accomplishment stipends, as well as publishing the quarterly journal *Puhallinorkesteri* ('Wind Band').

How Has Finland Coped with Covid-19 Thus Far?

As of early July, the Finnish situation is much more positive than in countries where the virus continues to spread. Here, there are still 3-5 new Covid-19 cases daily, mostly in the capital region. But in the Tampere metroplex, Finland's second-largest, there has not been a new case for four weeks, and nationwide not a single coronavirus patient remains in intensive care. As a result, social distancing restrictions have been relaxed, travel among most EU countries is again possible, and the first concerts of a delayed and sharply reduced outdoor summer season have resumed, though with socially-distanced seating and instructions posted everywhere about the importance of health and hygiene precautions for players and audiences alike. While new cases will be inevitable as international travel resumes, Finland feels confident in its ability to cope.

How is this difference explained? Finns often joke that they are natural social-distancers, a personal privacy trait shared with their Nordic neighbors. But there is also widespread trust in the national government and media, an efficient, comprehensive national health care system, civil and health registries via which precise health and safety information can be sent to each individual, especially those most at risk, and a willingness to abide temporarily with lockdown and other personal inconveniences for the greater good of the nation.



Cover of SPOL's Summer 2020 *Puhallinorkesteri* issue, featuring the virtual concert of Eric Osterling's *Bandwagon March* by the Kotka and Hamina Youth Wind Band under the direction of **Anne Kankare**.



Cameos of Sivuääni players at home during the lockdown.

My band, *Sivuääni, the Medical Orchestra of Tampere*, had a front-row seat for much that has happened, beginning with a dramatic second week of March. Up to that point, while we had been following for weeks the horrific situations in Italy and Spain, there had been relatively few Covid cases in Finland. On Wednesday the 11th, we had our last rehearsal, in preparation for two gigs the following week. One was the opening of an annual national medical conference, for which we have always played. The other was ceremonial music for a gathering of Finnish war veterans.

But abruptly, on Thursday the 12th, the medical conference was cancelled, as an outbreak of Covid-19 in the Helsinki region made it clear that Finland would not be an exception to the pandemic; all gatherings of over 500 were forbidden. On Friday the veterans event was cancelled. While this was much smaller, all were over 90 years old, the epitome of a high-risk group. On Saturday a nationwide lockdown was announced, including eventually sealing off the entire capital city region, where most cases had been reported, from the rest of Finland until the spread of the virus was under control.

Some *Sivuääni* players were administrators or physicians at the Tampere University Central Hospital. Others were professors at the University Medical School. All available expertise was needed to rapidly deploy additional facilities and services. In Tampere and nationwide, testing centers were established, tracking systems activated, intensive care units expanded, and there were virtually nonstop consultations on how best to confront the Covid emergency.

In time, it became apparent that these efforts had been successful; lockdown restrictions were cautiously loosened on the 1st of June. While all of the summer's music festivals and competitions had been postponed to 2021, bands could look forward to performing again. *Sivuääni* will have its annual 'band camp' in late August, and perform at an outdoor concert in early September.

What Did Finnish Bands and Musicians Do During the Lockdown?



The author recording 9 parts of Colin Bugby's Brass Band arrangement of 'Happy Birthday' via Acapella for a granddaughter's Zoom 8th Birthday Party. (MP4) Test version of Patrick Dolan's arrangement, using Yamaha Silent Brass® mutes, popular during the lockdown when all one's neighbors were home.

While some who were under lockdown for weeks on end may have felt they had far too much time with little to do, this seldom applied to musicians. It was a time to clean and polish instruments, or have them repaired or modified (instrument repair shops are usually one-person operations, and business boomed, by appointment or with special pickup and delivery service). There was also lively online traffic in used musical gear, as many apparently decided it would be a good time to experiment with different mouthpieces and mutes, or learn a new instrument. For music librarians, it was a time to scan charts and expand digital archives, taking note of any pieces for which parts were missing, so that when the Chatfield Library re-opened in early May, orders could quickly be placed (cf. *Puhallinorkesteri 1/2020: 'Where to Find Missing Parts and Out-of-Print Band Scores'*).

For players who confronted the monotony of practicing alone with no upcoming rehearsal or concert as an objective, the time was ripe for new learning aids. Early in the lockdown, self-produced recordings of individuals using the *Acapella* app on iPads and iPhones began to circulate on social media. It soon occurred to some that this app, or others like it, could also be used as a rehearsal aid. Players downloaded duet, trio, and quartet arrangements for their instruments from digital libraries, recording each of the parts themselves via *Acapella*. Not only was this more interesting than practicing alone, but more challenging and pedagogically useful due to the precise timing required for the parts to synchronize.

Finnish Band Experiences During the Covid-19 Lockdown

It occurred to some in *Sivuääni* that scores in our online music archive, to which all players had access, could also be used. Trumpet players could use *Acapella* to record all of the trumpet, cornet, and flugelhorn parts for a piece, producing the sound of an entire section. One could learn even more about sectional harmonies and the interplay of the different parts than during an actual rehearsal, since the parts could be played and analyzed repeatedly in any combination. Also, unlike often in rehearsals, when sections might be incomplete, all the parts would be covered.

The next step was combining instruments. Trumpet players who had trombones, for example, could play almost all the brass parts of a piece, as well as those of other Bb instruments, such as tenor saxophones and clarinets. Again, insight into the interplay of parts increased. Also, some of our pieces have ad lib solos over low-brass harmonies; via *Acapella* the harmonic foundation could be recorded for the soloists, so they could practice ad lib options with almost the full sound of the band (click for [MP3 sample](#) from John Warrington's *Bb Blues*). The value of this simple, low-tech rehearsal aid seemed obvious in retrospect, and should certainly also prove useful in future.

At present, *Sivuääni* is self-directed, so we were limited to voluntary interaction among individuals in the band. We are also relatively senior; all are not equally comfortable with technologies. Larger bands with full-time directors and music school instructors were able to use more advanced technologies more systematically. They also had younger players for whom using audiovisual technologies of all sorts had long been second-nature.

Technologies Used by Larger Bands and Music Conservatories

During the Covid-19 lockdown, these bands and music schools used technologies to maintain activity and continue musical traditions. Traditions are important during times of uncertainty. They help preserve a sense of belonging, of togetherness, and continuity.



Screenshot from the Rauma Boys' Band (Rauman Poikasoittokunta) virtual Mayday parade, keeping alive their tradition since 1959.

Springtime in Finland is high season for concerts and parades, especially around the Mayday holiday. In the southwestern seaport of Rauma, the 'Rauma Boys' Band' (SPOL's 2019 'band of the year', with an historic though archaic name, since the majority of its players are girls) had performed in the city's Mayday parade since 1959. This year there was no live parade, so the band staged a virtual parade, in full uniform, under the direction of Anne Lehtomäki-Koskinen, performing [Raine Ampuja's Sailor's Rap](#).

While their main objective was to maintain band activity during the lockdown, the video continued their 61-year 'parade' tradition. Moreover, via YouTube they reached a much larger audience, with greater publicity, than they would have with the normal parade — with promising feedback on new players and sponsorships for 2021!

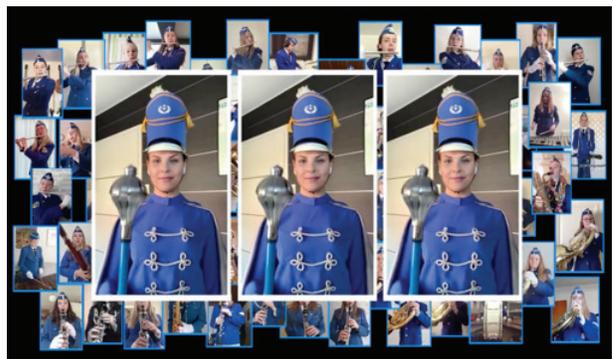
Drum majorette Jutta Lakaniemi (Rauma Boys' Band/Rauman Poikasoittokunta) leading Rauma's virtual parade.



Tampere Music Conservatory's Annaleena Ilveskivi performing the traditional Suvivirsi ('Hymn to Summer') at the opening of the Flute Choir's video, shown here from the top of Tampere's Pyynikki Observation Tower, with the Näsinnen Tower at rear.

Technologies also helped maintain other Finnish musical traditions. Normally, at the end of May, all schools conclude with ceremonies in which students, teachers, and parents sing together 'Suvivirsi' ('Hymn to Summer', from 1697). It is a deeply emotional tradition of long national standing. There were no school ceremonies this spring, but there are now many new 'Suvivirsi' tributes on YouTube and elsewhere to what would have been. Among them is this [flute choir highlight of Suvivirsi](#) by Tampere Music Conservatory teachers Annaleena Ilveskivi, Malla Vivolin, Ulla-Maria Pöyhtäri and their students.

Working together with the video brightened the weekly routine for students and teachers during the lockdown, provided closure to the term, and memorialized the odd Covid spring. Students also learned to produce 'concert-like' video performances, using a backing track and metronome. These were then assembled into the final video by Oskari Pöyhtäri, husband of Ulla-Maria, a musician himself with audiovisual engineering as a hobby.



Finnish Band Experiences During the Covid-19 Lockdown



Anne Kankare directing her virtual 'Distance Orchestra' with Kotka's Jokipuisto ('River Park') in the background, photo by Vesa Kankare.

Finally, in the tradition of springtime concerts, the youth bands of the southeastern seaports of Kotka and Hamina created the 'Kotka and Hamina distance orchestra' to test whether it could perform 'live' under a remote conductor, with caesuras and changes in tempo and volume, rather than just recording parts using a backing track.

Using videos of conductor Anne Kankare directing, with technical help from her husband Vesa Kankare, the band first tested the concept with *Eric Osterling's Bandwagon March*. When this proved successful, they recorded the more demanding *Silent Park* (part two of Timo Forsström's *Life in the Capital City*). Both show that bands can indeed perform directed virtual performances using relatively simple technologies.

Lockdown Technologies and the Future?

Finnish bands maintained their activity during the Covid-19 lockdown, just differently from before. While all would prefer to be together in person, technologies allowed them to be together virtually, and enabled the continuity of musical traditions. New modes of togetherness and musicianship prompted by the lockdown promise to be useful in future as well.

Suomalaisten soittokuntien kokemuksia koronakaranteenin aikana

Suomenkielinen yhteenveto

"Kuinka Covid-19 -karanteeni on vaikuttanut soittokuntiin Suomessa?" Tätä kysyi **Jerel Nielsen** Chatfieldin musiikkikirjastosta kesäkuussa. "Voisitko kirjoittaa aiheesta artikkelin?" Artikkelin ilmestyy Chatfieldin lokakuun 2020 uutiskirjeessä, ja tässä on siitä suomenkielinen yhteenveto.

Koronaviruksen nopea kansainvälinen leviäminen vaikutti dramaattisesti myös soittokuntien toimintaan. Konsertit ja festivaalit jouduttiin perumaan eikä harjoituksia voitu pitää. Heräsi epäily tulevista ja soittokuntien sähköpostifoorumeilla pohdittiin, päästäänkö esiintymään edes joulukuun 2020 mennessä. Jos ei, voisivat kaikki soittokunnat selviytyä näin pitkästä tauosta?

Mutta muusikot ovat luovia ja lannistumattomia. Soittokunnat ja soittajat alkoivat pian kehittää uusia konsteja ylläpitää ja kohentaa soittotaitoaan karanteenista huolimatta. Käyttöön otettiin erilaisia teknologisia ratkaisuja.

Suomalaisia on vain noin 5,5 miljoonaa, mutta he ovat yleensä hyvin koulutettuja ja teknisesti taitavia. Suomessa on yli 200 erilaista rekisteröityä soittokuntaa, jotka esiintyvät säännöllisesti. Uuden sukupolven säveltäjät ovat saaneet kansainvälistä mainetta ja Suomen Puhallinorkesteriliitto toimii aktiivisesti mm. järjestämällä koulutusta ja tukemalla verkostoitumista.

Suomen koronatilanne heinäkuun alussa oli paljon parempi kuin monessa muussa maassa, joten etäisyydenpito-ohjeita on höllennetty ja matkustus useisiin EU-maihin on taas mahdollista. Ulkoilmakonsertteja on jälleen saatu järjestää.

Mikä selittää tämän eron eri maiden tautitilanteessa? Suomalaiset ovat usein vitsailleet, että he luonnostaan pitävät sosiaalista etäisyyttä muihin. Mutta yleisesti ottaen Suomessa

luotetaan hallitukseen ja tiedotusvälineisiin sekä kattavaan ja tehokkaaseen terveydenhuoltojärjestelmään. Joten jos maan etu niin vaatii, ovat suomalaiset valmiita suostumaan väliaikaiseen karanteeniin ja muihin mahdollisiin rajoituksiin.

Muusikot löysivät helposti tekemistä karanteeniaikana. Oli aikaa puhdistaa ja korjata soittimia sekä testata erilaisia suokappaleita ja vaimentimia. Soittajat kokeilivat myös erilaisia oppimislustoja, kuten Acapella-sovellusta, joka mahdollistaa duettojen, triojen, kvartettien, tai jopa suurempien sovitusten soiton yksin itsekseen.

Isot soittokunnat ja musiikkikoulut käyttivät teknologiaa toimintansa ylläpitämiseksi ja jatkaakseen musiikkiperinteitään. Perinteet ovat tärkeitä epävarmoina aikoina, ne auttavat säilyttämään tunteen yhteisöllisyydestä ja jatkuvuudesta.

Esimerkiksi Rauman Poikasoittokunta tuotti virtuaalisen vappuparaatin, kun normaalia paraattia ei voitu järjestää. Tampereen konservatorion huilunsoitonopettajat **Annaleena Ilveskivi**, **Ulla-Maria Pöyhtäri** ja **Malla Vivolin** oppilaineen loihdivat tamperelaisen kesän virtuaalisen *Suvivirren* avulla, kun normaalit kevätkuuhlat jouduttiin perumaan.

Ja Kotkan-Haminan Nuoriso-orkesterin virtuaalikonserdit osoittivat, että soittokunta voi todellakin seurata johtajaansa "etänä" säilyttäen täysin musiikillisen dynamiikan. Kaikki nämä esimerkit suomalaisesta muusikkoudesta ja teknisestä tietotaidosta löytyvät YouTubesta, missä kaikki voivat katsoa ja nauttia.

Suomalaiset soittokunnat siis jatkoivat toimintaansa koronakaranteenin aikana, tosin eri tavalla kuin aikaisemmin. Teknologian avulla soittajat saattoivat olla yhdessä virtuaalisesti, vaikka eivät voineet tavata kasvoitusten, ja teknologia myös mahdollisti musiikkiperinteiden jatkumisen.

Voisiko myös sinunkin soittokuntasi hyödyntää näitä uusia teknologioita? Artikkelin kuvailee esimerkkeinä ne tietokoneohjelmat ja teknologiat, joita Rauma, Tampere ja Kotka-Hamina käyttivät virtuaalikonserteissaan. Niinpä muutkin soittokunnat voivat halutessaan niitä käyttää.

'Part Two': Background Information on the Videos and Technologies

How were the videos produced? What did they have in common? Could you use the same or similar technologies to produce your own videos and rehearsal aids?

All were the first videos the groups had ever created. Those of Tampere and Kotka-Hamina were produced totally by the group's own resources. Only the Rauma band used an outside professional. Thus, producing similar videos should also be possible for other bands, as long as there is at least one person with a musical aptitude and enthusiasm for technology to coordinate, and the proper resources are at hand.

For the videos, initially a model backing track with the desired tempo was sent to the players as an MP3 or MIDI file so they could time their playing to the model. The players then recorded their audiovisual (or separate audio and video) tracks, using WhatsApp or other software, and sent them as MP3 or MP4 files for final assembly. In all three groups, players were enthusiastic about the projects; all had the needed devices and knew how to use them. Only a few chose not to participate; some did only the audio part, and were thus heard but not seen in their video. As players recorded themselves with their own devices, a grand mixture of different cellphone, tablet, computer-based, and other cameras and microphones was used. All produced an acceptable output, though some needed minor editing for balance in the final video.

The Rauma Boys' Band (*Rauman Poikasoittokunta*)

The Rauma video was produced within a two-week period, with the objectives of maintaining both the band's activity and their Mayday parade tradition. Parts for Raine Ampuja's Sailor's Rap were circulated to the players, along with an audio track with metronome clicks for the tempo. Players self-recorded their tracks; these were then sent to one of the band members, who collected and then forwarded them to sound engineer Jouni Lehtonen, who produced the video. The video-editing software used was Magix Vegas Pro, with Steinberg Cubase Pro for audio editing and Adobe Photoshop for still frame editing. Uniconverter software was used to convert several 'nonstandard' videos to a format compatible with Magix Vegas Pro.

The Flute Choir of Tampere Music Conservatory

Tampere Conservatory's Flute Choir production of *Suvivirsi* was a collaborative project of three flute teachers and their students. The idea originated after the lockdown in mid-March, with the objective of completing it before the traditional school-ending date at the end of May.

The starting point was Annaleena Ilveskivi's flute choir arrangement of *Suvivirsi*, to which all three teachers and several students contributed modifications. These include the live birdsong at the beginning of the video, recorded by teacher Ulla-Maria Pöyhtäri (red jacket in the video) near her home, which was followed by Ulla-Maria's simulated birdsong on her flute.



Flute Choir students performing *Suvivirsi*, with the Tampere Conservatory and Pyynikki Square beneath in the background.

As with Rauma, students were sent a backing track with metronome clicks to help coordinate their parts. Students then recorded themselves and sent their tracks to Ulla-Maria's husband, Oskari Pöyhtäri, who used DaVinci Resolve to edit the video, and Reaper (with a modest Waves VST library) for the audio track. Adobe Photoshop was used for some still editing.

Oskari Pöyhtäri is a French horn player for The Guards' Band of the Finnish Defense Forces, but also a self-educated audio and visual engineering enthusiast; he produced the video from his home studio. He also recorded the video's background vistas from the Pyynikki Observation Tower, overlooking the Conservatory and central Tampere, located on an isthmus between Lakes Näsijärvi and Pyhäjärvi.

The Kotka and Hamina Youth Wind Orchestra

The Kotka and Hamina joint youth wind band, about 100 players aged 9 to 60ish, is affiliated with the Kotka Regional Music School. All players come from the area of Kotka and Hamina. As the Covid-19 lockdown continued, with everyone missing rehearsals, concerts, and trips abroad that had been on their schedule, conductor Anne Kankare and her husband Vesa Kankare (also a percussionist and tuba player for the band, as well as Board Chair of the Kotka Youth Wind Orchestra Association) had the idea of creating a 'remote' band which could play 'live' via a video of her conducting. Would it work?



Anne Kankare's direction video being recorded by Vesa Kankare in their home studio, photo by Susanna Kankare.

The primary idea the band explored was the ability of 'remote' players to rehearse with a conductor, rather than simply following a tempo-mapped audio track. Initially, the concept was introduced to the players by sending the players an audio track showing how Anne Kankare wanted it to sound. Then Anne was filmed conducting the pieces, and the conducting videos were sent to the players.

The audio track was an enhanced MIDI file, edited with Logic Pro to provide better musical quality and articulation (basic MIDI does not represent well how a band should sound). With Logic Pro, more realistic sampling could be used, and a visual measure and beat display inserted for the *Bandwagon March* trial run, as it had a standard tempo throughout. The MIDI files, which included timing 'clicks', were tuned to 442Hz.

Basic MIDI tracks for editing are often available from music publishers; otherwise they can be generated by entering the score into Sibelius or similar software. YouTube videos of the piece by different groups can also be used as models. These can be viewed directly online, or captured and customized.

Several shorter videos were produced for the different instrumental sections to help players with difficult parts. The players all liked practicing with the videos!

'Part Two': Background Information on the Videos and Technologies



Flutist Alli Heinonen playing Silent Park under Anne Kankare's direction via her cell phone, photo by Paula Järvisalo.

After sectional preparation, Eric Osterling's relatively simple *Bandwagon March* was used to test the idea. Next the band tried *Silent Park*, by Timo Forsström, part 2 of his *Life in the Capital City*. *Silent Park* was more difficult, with caesuras and tempo and volume changes. Both were successful, and it was decided to publish the videos as proof of concept.

The players were given instructions on how to record themselves. While for *Bandwagon March* their native device software could be used, for *Silent Park* the free *Spire* (iOS) or *RecForge II* (Android) apps were used to avoid the automatic volume equalization of most cellphones and tablets. *Spire* and *RecForge II* allowed dynamics 'as played'.

Whereas for *Bandwagon March* the players had needed only two devices, for *Silent Park*, they needed three: one for the video, a second for the audio, and a third to see the conductor. While there are commercial apps which allow AV recording without the loss of audio dynamics, the band could not expect players to purchase apps for the project. Since everyone had three devices available, the free apps were used.

The players sent their audio and video tracks to Vesa Kankare via *WhatsApp*. First each audio track was put into Logic Pro. The instrumental sections (trumpets, clarinets, etc.) were first synchronized and mixed, and then all sections were synchronized and mixed together. The main things which needed correction for the final video were left-right orientation, mirror images, and a few synchronization issues from the video and audio tracks having been recorded separately. Finally, the entire audio track was equalized, and stray noise (a cellphone 'bling') removed; the final video sounded surprisingly like a real band performance, as you will have heard.

Could Your Band Also Do This?

Could your band also make similar videos? Both Kotka's Vesa Kankare and Tampere's Oskari Pöyhtäri were self-taught audiovisual enthusiasts, and the quality of their work is evident. One need not be a professional audiovisual engineer to produce high-quality output.

While Vesa is Senior Lecturer in Information Technology at South-Eastern Finland University of Applied Sciences, XAMK, his field is cybersecurity; he had no prior experience with video editing on this scale, although some with audio editing.

However, he had licenses for Adobe's Premiere Pro and After Effects, as well as Logic Pro, with which he produced the band's videos. Vesa feels similar videos can be made by anyone who is technologically oriented, understands the music, and can invest the time needed to learn the software and record the material. However, if one does not already have licenses, the software could be costly, and adequate computer power is needed to process the audiovisual files. Vesa's 'quite powerful' iMac needed over five hours to render the *Silent Park* video, partly due to its 3D mapping. In total, *Silent Park* took about 70 hours to complete.



A Few Notes on MixChord's Acapella App

The *Acapella* app from MixChord Inc's PicPlayPost is available for both iOS and Android (reviews have claimed that the iOS version works better and is updated more frequently). The basic version, allowing recordings up to one minute, is free. The advanced version, allowing longer recordings, is EUR 9.90 monthly (iOS).

With *Acapella*, one can choose the tempo, and there is an optional metronome click, but a headset is needed to hear the clicks, and they still may be inaudible after the first parts have been recorded. When recording parallel parts, latency between the part being played and those already recorded easily disturbs one's timing. There have been frequent updates to *Acapella* to correct latency and synchronization issues.

If one uses the iPhone or iPad microphones to record, the auto-gain control will flatten volume dynamics. There is a simple post-recording mixer that allows volume adjustment of one part against the others, but dynamics within an individual part cannot be adjusted. One can choose to accept or re-do a part after it has been recorded, and re-record parts or the entire piece *ad infinitum*, but time is needed to render each accepted part, and more time to finally render the entire piece (especially if the maximum 9 *Acapella* parts are being recorded).

Still, surprisingly good results can be achieved, bearing in mind these are coming from mobile phones and tablets, rather than high-powered computers. If one is mainly interested in the audio track, as for example when recording background harmonies for soloists, the audio is easily separated and can be edited with Logic Pro or similar on a desktop computer.



About the Author: John D. Hopkins plays the trumpet for Sivuääni, the Medical Orchestra of Tampere, Finland. He is also a member of the Chatfield Music Lending Library.