Title: Transcontinental Grapevine

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1. PROGRAM NOTES

"Transcontinental Grapevine" is a new crowdsourced telematic work by the Virginia Tech Linux Laptop Orchestra (L2Ork) that was co-created and performed with collaborators from UNTREF, Buenos Aires, Argentina. The work is inspired by the introductory loop of the "Grapevine" song by Lane 8 and Elderbrook and utilizes L2Ork Tweeter online collaborative musicking platform that allows for perfect sync among performers regardless the distance (in this case two groups of performers, 11 in total, were over 5,000 miles apart). The work's EDM aesthetics intentionally seeks to test the limits of the newfound platform's ability to sync players, as well as to expand the telematic musical vocabulary.

Every aspect of this work was co-created and realized collaboratively by contributors from two geographically distant areas. Virginia Tech L2Ork co-creators consist of Ivica Ico Bukvic, Justin Kerobo, Daniel Manesh, William Rhodes, Jacob Alan Smith, and Caden Vandervort. UNTREF L2Ork community co-creators include Uma Futoransky, Gala Lucía González, Joaquin Montecino, and Lauti Sosa. The work starts with Lane 8's "Grapevine" intro, and then crossfades into a crowdsourced theme and variations.

2. PROJECT DESCRIPTION

"Transatlantic Grapevine" is third work belonging to the newfound live crowdsourced telematic musicking genre. It was co-created and performed using the ensemble's L2Ork Tweeter [1] platform that inspired the aforesaid genre. Its intentional EDM aesthetics is rooted in the Lane 8's "Grapevine" song intro that serves as the basis for the resulting 10-minute theme and variations. Tightly synced parts are also designed to both test and showcase the limits of the platform's ability to sync musicians over the internet, regardless the distance. For this particular piece, 11 musicians have been distributed across two continents over 5,000 miles apart, with a vast majority using wireless internet connection, including one performer who utilized a public coffee shop WiFi with limited bandwidth. The said platform that encompasses all stages of co-coreation from ideation and rehearsal to performance and audience participation, is free and open source, and is publicly available on the ensemble's webpage.

3. PERFORMANCE NOTES

The work is envisioned to be performed live telematically. Doing so requires that the host installs Pd-L2Ork free open source software developed and maintained by the L2Ork ensemble on the computer that is connected to the venue PA system and broadcasts stereo audio output through the performance venue's PA system. Pd-L2Ork includes the L2Ork Tweeter client—to access it, open the Pd-L2Ork browser by going into the Help menu and selecting "Help Browser". Then, scroll to the bottom of the help browser, and click on L2Ork Tweeter, and then again on L2Ork Tweeter. After this, reopening the L2Ork Tweeter can be then done using the File menu's Recent Files submenu. The same computer should have a reliable network connection to the internet (ethernet preferred, WiFi is also an option). In parallel, the desktop of the same computer should be projected onto the performance venue's screen showcasing the software's main window that displays performer activity. Next to the window should be a zoom session with performers. The software's main window may need to be zoomed out to accommodate both. Zoom session should be muted as performers will use the same to verbally communicate with each other. Optionally, select performers can also be present on stage in which case they need to have a stable WiFi access. Optionally, other listeners (audience) in and outside the venue can experience the performance by connecting using the same L2Ork Tweeter client. Stereo audio output should be also channeled to the venue PA system's subs.

4. MEDIA LINK(S)

- Video: https://youtu.be/OTQnQuOLXDk
- Preview Video: https://l2ork.music.vt.edu/video/TGP.mp4

5. BIO

Named as one of the top six national transdisciplinary exemplars (a2ru, 2015), and one of the top eight research projects at Virginia Tech (DCist, 2014), a contemporary multimedia ensemble Linux Laptop Orchestra or L2Ork (pronounced as 'lohrk'), explores the collaborative nature of ensemble-based musicking through the use of innovative human-computer interaction technologies. L2Ork seeks integrative approach to arts, design, engineering, and science, and nurtures communities eager to explore the boundaries of music through technology.

Founded by Dr. Ivica Ico Bukvic in May 2009, L2Ork is part of an interdisciplinary initiative by Virginia Tech College of Architecture, Arts, and Design, the School of Performing Arts and its DISIS Interactive Sound & Intermedia Studio (DISIS), and the Institute for Creativity, Arts, and Technology

(ICAT). As the world's first Linux-based laptop orchestra incorporating extensive study of gesture and Taiji (Tai Chi) choreography and other extended performance techniques L2Ork offers optimal infrastructure for creative research at minimal cost. By pursuing a seamless integration of arts, design, science, and engineering, it in part seeks to bridge the gap between STEM and the Arts, with particular focus on K-12 education.

UT Prosim is a foundational pillar of L2Ork. Since its inception, the initiative has helped start seven laptop orchestras in North and South Americas, many of which rely heavily on its affordable design. L2Ork's infrastructural backbone Pd-L2Ork, a visual programming environment with its unique K-12 learning module has been utilized in dozens of K-12 Maker workshops, including the 2014 Raspberry Pi Orchestra summer gifted program, and the ongoing 13-year partnership with the Boys & Girls Club of SW VA. It is also currently used around the world by thousands of artists, designers, researchers, and educators. In 2020, the ensemble introduced L2Ork Tweeter, its new free and open-source online platform for collaborative instrument design, ideation, improvisation, composition, rehearsal, and performance. Since, it has been actively developing Tweeter communities around the world, with Universidad Nacional de Tres de Febrero (UNTREF) located in Buenos Aires, Argentina, being the first such established community. http://l2ork.music.vt.edu

Short version:
Named as one of the top six national transdisciplinary exemplars (a2ru, 2015), and one of the top eight research projects at Virginia Tech (DCist, 2014), a contemporary multimedia ensemble Linux Laptop Orchestra (L2Ork, pronounced as 'lohrk'), explores musical collaboration through the use of innovative human-computer interaction technologies for the purpose of pursuing an integrative approach to design, engineering, arts, and science. l2ork.icat.vt.edu

6. ACKNOWLEDGMENTS

7. COMPLIANCE WITH ETHICAL STANDARDS

The participants in the ensemble were either students enrolled in a class for credit or external volunteers. The ensuing crowdsourced content is attributed to all co-creators and co-performers. There is no known of conflict of interest and there are no direct funds/investments associated with the creation and production of this work. This project does not involve any form of data collection beyond recording of the ensuing live crowdsourced telematic work.

8. REFERENCES

[1] I. Bukvic, "Latency-, Sync-, and Bandwidth-Agnostic Tightly-Timed Telematic and Crowdsourced Musicking Made Possible Using L2Ork Tweeter," New Interfaces for Musical Expression, the University of Auckland, New Zealand, 2022.