

Editorial: Live Coding Sonic Creativities

Live coding has evolved considerably since its emergence in the early 2000s, as presented in the seminal 2003 *Organised Sound* (8/3) article ‘Live Coding in Laptop Performance’ by Collins, McLean, Rohrhuber and Ward. Differentiating itself from early laptop music and other computer music, it is a performance practice that promotes the sharing of the musical process with the audience, emphasising the code itself as a form of musical notation. Live coding has been adopted into various fields of art, but as musical algorithmic thinking, it has been explored and developed by many practitioners and collectives across the world up to the present and there is a broad range of divergent practices within the field.

We are therefore thrilled to present the special issue ‘Live Coding Sonic Creativities’, which is the first special issue on live coding in *Organised Sound*. This has been a long journey of almost two years of work. In response to the invitation by Leigh Landy and James Andean in September 2021, we decided to offer a free online workshop to interested authors and a cycle of early draft feedback for early career authors. The workshop received 38 expressions of interest from around the globe. The workshop, which was held on 30 May 2022, gave us the opportunity to form a platform for authors to discuss and develop their ideas related to the special issue. Eight of the articles published here are from authors who took part in the workshop. Overall, we think this process was helpful and inclusive to the authors because several of the authors are publishing in the *OS* journal for the first time.

The core research question of this special issue concerns the idiosyncratic sonic creativities that emerge from the practice of live coding and what new sonic material live coding has enabled. This special issue takes the pulse of live coding applied to sonic creativity with a breadth-and-depth collection of 14 articles and a book review. In our call for submissions, we asked where live coding might be heading sonically speaking. How can live coding bring novel ways of organising sounds never experienced before? What new languages, systems and interfaces could enable new sonic and musical ideas? We think now is the opportune time to inspect live coding from a sonic arts perspective as well as a software studies and (digital) humanities perspective, looking at the past, present and especially the future of live coding.

In this issue, we seek to critically analyse live coding from a sociocultural and musicological perspective, as well as enquire how digital culture and cultural heritage have been impacted by this practice. The collection of articles is genuinely diverse in terms of themes including new theories and philosophies on live coding, diversity and inclusion and contemporary sociocultural processes embodied by different communities of practice. The articles represent a breadth in musical genres, approaches to live coding, interdisciplinary practice related to sound-based creativity, innovative sound and music composition, and new paradigms and environments that enable new ways of thinking and working with sound, as well as speculative futures and new imaginaries of live coding.

The first part of the issue starts with theoretical advances in live coding as well as diversity and inclusion initiatives and communities of practice. The first article, ‘Musical Live Coding in Relation to Interactivity Variations’ by Georgios Diapoulis, presents a cognitive approach to live coding by looking at pre-reflective processes in gestural interaction. This is followed by Aldo Mauricio Lara Mendoza, Laura Viviana Zapata Cortés and Emre Dündar’s ‘The Unknowing Side of the Algorithm: Decolonizing live coding from Latin America’, which discusses the practice of live coding in Latin America from a decolonising perspective. In ‘Livecoderas Latinoamericanas: Diversity, educational access, and musicking networks in live coding in Latin America’, Emma Wilde and Mario Alberto Duarte-García discuss the opportunities that live coding has offered to women live coders in Latin America. Finally, we have Patrick Hartono and Stevie J. Sutanto’s ‘Algorave Music Practice in Indonesia: Paguyuban Algorave’, a study on the creative practice of Algorave music in Indonesia.

The issue continues with new approaches to live coding and interdisciplinary live coding. In ‘Live Coding Outside, Live Coding Inside: Listening, participation and walking’, Hernani Villaseñor-Ramírez examines live coding connected to soundscape, sound art installation and soundwalking. Mattias Petersson offers his perspective on ‘Live Coding the Global Hyperorgan: The Paragraph environment in the indeterminate place’, discussing geographically distributed hyperorgans that are performed in network music performance using live

coding. In ‘Visual Representations to Stimulate New Musicking Strategies in Live Coding’, Raul Masu and Francesco Ardan Dal Rì explore different visual time representations that are helpful for developing new musicking strategies while live coding. In ‘Agent-Based Music Live Coding: Sonic adventures in 2D’, Gerard Roma explores visual agent-based modelling applied to live coding. Alexandros Drymonitis investigates in ‘Live Coding Poetry: The narrative of code in a hybrid musical / poetic context’ the connections between musical live coding and code poetry.

The last part of the issue covers innovative composition, new paradigms and environments, as well as speculative futures. In ‘Live Coding and Music Production as Hybrid Practice’, Hussein Boon presents live coding applied to music production in education. Andrew Brown examines in ‘Live Coding Patterns and a Toolkit for Pure Data’ the design patterns in live coding practices and languages. In ‘Discovering Creative Commons Sounds in Live Coding’, Anna Xambó Sedó investigates the potential of manipulating online Creative Commons sounds in live coding. This is followed by ‘Anatomical Intelligence: Live coding as performative dissection’ by Joana Chicau and Jonathan Chaim Reus, which explores the use of live coding to dissect machine learning algorithms. In ‘On the Integration of Machine Agents into Live Coding’, Elizabeth Wilson, George Fazekas and Geraint Wiggins consider the ways live coders can collaborate with machine agents.

The thematic issue concludes with the book review ‘Alan F. Blackwell, Emma Cocker, Geoff Cox, Alex McLean and Thor Magnusson, *Live Coding: A User’s Manual*. Cambridge, MA: MIT Press, 2022’ by Ian Clester, which presents a detailed review of a timely book that complements this special issue well. A take-away message from the presented articles is that live coding is much more than an artistic practice. Live coding is a community and a way of thinking and seeing the world. Live coding keeps evolving and is contributing to the transformation of the field of sonic creativity in search of unheard and unknown sounds.

Thanks to the authors for sharing their experiences and reflections on their live coding practices from a sound- and creativity-based perspective. Special thanks to the reviewers, without whom this special issue would not be possible. Last but not least, we are grateful to *Organised Sound* editor Leigh Landy for taking part in the workshop and for being a great support throughout the entire process. “Thor Magnusson worked on this during his Intelligent Instruments project (INTENT), which is funded by the European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation programme (Grant agreement No. 101001848).”

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