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Killick, Andrew. 2020. ***Global Notation: Visualizing the World's Music***. In English. http://globalnotation.org.uk.

Global notation is a system designed by Andrew Killick to create visual representations of any kind of music, for transcribing and analysing recorded sound or as a foundation for collaborative performance. Killick explains that global notation "seems increasingly needed in a world where music from all cultures circulates freely and inspires endless cross-cultural collaborations and fusion styles. A notation that can represent all this music on an equal basis should facilitate the exchange of musical ideas and promote a fuller appreciation of the world's musical diversity." He developed the system in 2016 so that students in world music classes could analyse music sound and compare structures and styles across genres, communities, and historical eras. He updated and expanded the website in July 2019, suggesting that global notation could also be useful as an alternative to staff notation for music transcription, and for performers and composers working "beyond the bounds of a single established tradition." Killick, a professor in the Department of Music at the University of Sheffield (UK), constructed and manages the site.

The website has two parts: a manual for the global notation system, which assumes no knowledge of Western staff notation or music theory, and recent posts and comments. The manual contains ten sections, several with one or more ancillary pages. The first two sections, the home page and introduction, explain that global notation will continue to develop as website users find solutions for additional complex notational problems. Killick encourages users to provide feedback using comment boxes at the end of each page. The introduction has links to two professionally produced videos that demonstrate the system briefly and concisely. In particular, the video posted on Skillshare, an online learning platform, is fun, fast-paced, and engaging. Section three, a quick guide printable in PDF format, is useful for those who know staff notation or who have worked through the entire manual and want a handy refresher.

Sections four through ten constitute the manual's core. These sections explain how to specify details of performance and musical style, such as vibrato and rubato, not available in traditional Western notation; onset timing; specified pitch; dynamics and articulations; writing by hand; pitch combinations; and using sound analysis software. The system involves establishing layers of lines onto which users can graph components of sound. Killick's examples use horizontal lines read from left to right, but the system can be set up to read right to left or vertically, to accommodate multiple cultural norms. Layers are

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stacked to represent simultaneous layers of sound, as in the case of melodic lines accompanied by percussion instruments of indefinite pitch. The effects created by percussion instruments that employ different playing techniques to produce different sounds are easy to graph in this system. For unspecified durational values, the system uses symbols of fixed shape, the default being a wedge with the vertical edge on the left to indicate the onset of sound. For specific rhythmic values, users can extend the wedge shape to represent duration. The system accommodates both metred and unmetred music through the use of a time scale, beat lines, beat divisions, and bar lines. Ancillary pages explain how to graph fast ornaments, performance ambiguities, and additive rhythms.

Users can specify either absolute or relative pitch, but choosing a reference pitch and using the cent system to designate other pitches accommodates multiple interval structures and scales. Once the reference pitch is drawn as a bold horizontal line, other pitch lines are spaced vertically in proportion to the intervals between them. Only the pitches actually heard in a piece of music appear in the notation. Ancillary pages explain how to treat extended scales, wide pitch ranges, extra-scalar pitches, pitch bending, articulation, and melisma. Furthermore, various melodic layers are possible, such as melody with drone, counterpoint, and chords. The system also permits relating melody to chords and text underlay. A separate section treats dynamic markings and articulation. Killick bases symbols for dynamic markings on sound-level displays used in electronic audio equipment, since these are more easily recognisable than symbols used in staff notation. Users can write global notation by hand or with a graphics software program; Killick uses CorelDRAW.

Killick designed global notation to be applicable to all musics, and users can decide precisely which components of sound they wish to notate. Thus, the great strengths of global notation are its flexibility and accessibility. Killick's definitions of technical music terms, scattered throughout the website, are very useful in teaching general students. The website is well designed and easy to use, with appropriately placed illustrations and audio clips that clarify the system. Killick's discussions of waveform graphs, pitch-time graphs, and spectrogram analyses of timbre will engage those interested in acoustics, and extend melograph and pitch bend notation experiments conducted by scholars such as Charles Seeger (1951, 1957) and George List (1985). Scholars interested in the history of transcription can compare global notation to Jaime de Angulo's graphic notations of Achomawi (Pit River Indian) songs, described by Lou Harrison as "flags and banners of various sizes on various levels" (1988:6).[1]

I asked undergraduate music students to transcribe archival recordings of unaccompanied, monophonic folk songs from northern New Mexico in both global notation and staff notation. In general, students with greater fluency in staff notation found it somewhat more difficult to understand global notation. Conversely, those with

1. For detailed information on automatic and mechanical transcription methods, and on the history of transcription in ethnomusicology, see Ellingson (1992) and Nettl (2015).

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less fluency in staff notation found global notation easy to grasp. The performance style of the songs transcribed involves many vocal ornaments, ambiguous durational values, and extra-scalar pitches. The students agreed that global notation holds a distinct advantage over staff notation in representing these expressive techniques. Furthermore, the composers in the class, as well as the composer with whom I team-taught, saw exciting possibilities for global notation in their creative work. Killick deserves congratulations for devising global notation; perhaps one day it will lead to the fulfillment of Seeger's prediction that "before a hundred years are passed our present notation will look more like a graphic than a symbolic method of writing" (1951:106).

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References

Ellingson, Ter. 1992. "Transcription." In *Ethnomusicology: An Introduction*, ed. Helen Myers, 110–152. New York: W. W. Norton & Company, Inc.

Harrison, Lou. 1988. "Jaime de Angulo: An Introduction." In *Jaime de Angulo: The Music of the Indians of Northern California*, ed. Peter Garland, 6. Santa Fe: Soundings Press.

List, George. 1985. "Hopi Melodic Concepts." *Journal of the American Musicological Society* 38(1):143–152.

Nettl, Bruno. 2015. *The Study of Ethnomusicology: Thirty-Three Discussions*, third edition. Urbana, IL: University of Illinois Press.

Seeger, Charles. 1951. "An Instantaneous Music Notator." *Journal of the International Folk Music Council* 3:103–106.

———. 1957. "Toward a Universal Music Sound-Writing for Musicology." *Journal of the International Folk Music Council* 9:63–66.

Histories of the Ephemeral. Podcast series hosted by Katherine Butler Schofield. In English.

1: "The Orpheus of Delhi: The Maestro Khushhal Khan and the Mughal War of Succession, 1657–8."
2: "Miyan Himmat Khan and the Last Mughal Emperors."
3: "A Bloody Difficult Woman: Mayalee Dancing Girl vs. the East India Company."
4: "Eclipsed by the Moon: Mahlaqa Bai and Her Teacher 'The Incomparable' in Nizami Hyderabad."
5: "The Rivals: Anjha Baras Khan, Adarang, and What Happened to Muhammad Shah's Court."

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