In 1973, anthropologist Clifford Geertz famously offered that, “Man is an animal suspended in webs of significance he himself has spun,” continuing on to suggest that we might “take culture to be those webs.”1 Impossibly extracting ourselves for a moment from the sticky tangle of gender specificity and neutrality uneasily marked by the word “Man,” we could say, following anthropologist Matthew C. Watson, that Geertz’s metaphor makes people into spiders and anthropology into arthropology.2

Tomás Saraceno’s Arachnid Orchestra weaves such anthropology and arthropology together, proposing webs of sonic significance that crosswire human and spider beings. The orchestral analogy animating Saraceno’s piece, which has orb-weaving spiders from genera Nephilia and Cyrtophora serving as string players and members of the families Lycosidae and Sparassidae playing percussion, translates a 16th and 17th century European musical and cultural practice into a webworked invertebrate idiom — with ballooning spiders, who activate an Aeolian Theremin-inspired instrument, extending the analogy into the terrain of the mid-twentieth century aelectrosonic.3 The Arachnid Orchestra is thus a record of what happens when one tradition of human musical aspiration is transposed into a different species key. If, as Hugh Raffles writes, “Vibration is the currency of the web-dwellers. Mimicry is their method,” that mimicry is here piloted into a cross-species anthroarachnosonic.”4

Insofar as the Arachnid Orchestra replays a specific musical tradition and history, then, I wonder whether the spiders caught up in this form might similarly be imagined as engaged in another practice of reproduction-with-a-difference:5 DJing, spinning records … records, here, of their relations with their human aesthetic interpreters.

Spiders of the Nephilia genus build their orb-webs upon a matrix of threads radiating from a central node, with that spoke-like pattern then serving as the armature for the sticky spiraling webs that these arthropods spin out from the middle. That practice of spiraling evokes a major tradition of modern sound reproduction — one that has made sound round. From piano rolls to wax cylinders to gramophones to cassette tapes to CDs to the first generation of the iPod controller wheel, sound storage-and-replay formats have frequently taken the form of the circle or spiral.6 Even one of the latest digital playback programs, the Echo Nest’s “Infinite Jukebox,”7 winds the linear temporality of a song into a self-completing circle.

3 In Earth Sound Earth Signal: Energies and Earth Magnitude in the Arts (Berkeley: University of California Press, 2013), Douglas Kahn coins the term aelectrosonic to describe how, starting in the 19th century, “naturally-generated rather than human-generated electromagnetic activity … was heard [as background sound in telephone lines, for example] as music or otherwise aesthetically-engaged,” and engaged through (often implicit) metaphors of the Aeolian harp: “A quarter century before Watson [listened in on telephone lines], Henry David Thoreau made much of the Aeolian sounds he heard on telegraph lines (the ‘telegraph harp’), and much was made of the Aeolian more generally as either the music of nature performed on naturally-occurring or on human-made instruments.” Douglas Kahn and William R. Macauley, “On the Aelectrosonic and Transperception,” Journal of Sonic Studies 8 (2014).
5 By reproduction-with-a-difference, I mean simply to flag how the replication of phenomena can never happen precisely, how, as anthropologist Marilyn Strathern writes, “The ideas that reproduce themselves in our communications never reproduce themselves exactly. They are always found in environments or contexts that have their own properties or characteristics.” Marilyn Strathern, Reproducing the Future: Essays on Anthropology, Kinship, and the New Reproductive Technologies (Manchester: Manchester University Press, 1992), 6.
with self-similar measures within a song linked to one another across song time via circle-crossing webs. The difference, of course, for Saraceno’s spiders is that they infuse into their revolutions their own vital present presence, not, as John Philip Sousa complained, at the opening of the twentieth century, like those “talking and playing machines [that] reduce the expression of music to a mathematical system of megaphones, wheels, cogs, disks, cylinders, and all manner of revolving things.”

Now, not all spiders spin circularly: many spider DJs spin tanglewebs or cobwebs, and maybe those, vibrating together, are the key object here; after all, string-playing, orb-weaving Nephilia are, in Saraceno’s piece, set to do their oscillatory work on Cyrtophora tent-webs and Aranea mitificus partial orb-webs, suggesting a mashed-up, bastard pop spider internet network, one in which spiders Spotify their prey in their webs, using the beats of their captives’ wings to, Pandora-like, surprise them. This question of prey brings up a query for the piece: how, in Saraceno’s piece, does capture figure in? Saraceno’s spiders are fed during the daily care and maintenance of the installation, but are not provided with prey during performances. Is the absence of prey the dynamic, then, that creates the music? What is the form — orchestral music, multispecies sound, suspenseful silence — that is caught, for humans and spiders, in these webs, empty and full, of significance?

6 In 1977 a NASA team led by astrophysicist Carl Sagan placed on board the interstellar-bound Voyager spacecraft two “Golden Records,” gold-plated phonograph albums featuring collages of Earth’s cultural, natural and industrial sounds. These spirals of round sound themselves traced a spiraling trajectory as the Voyager spacecraft moved from the orbits of the inner planets through those of the outer planets and finally past the edge of the heliopause. In 2014, Tomás Saraceno’s “Cosmic Jive: The Spider Sessions” (Museo d’Arte Contemporanea di Villa Croce, 2014) used a Flexi disc to propose a bioacoustics experience that could bring together cosmic sounds, arachnid rhythms and human composition (see also Stefan Helmreich, “Remixing the Voyager Interstellar Record: Or, As Extraterrestrials Might Listen. In “Sounds of Space,” Ray Macauley, ed., special issue of Journal of Sonic Studies 8.

7 According to the FAQ page of the Echo Nest, “This web app lets you upload a favorite MP3 and will then generate a never-ending and ever changing version of the song.” The tagline for this app reads “For when your favorite song just isn’t long enough.”


9 If one were to imagine a web piece played with prey, one could cruelly imagine as perfect candidates lac bugs, those south Asian insects whose bodies were once used as the raw materials for shellac, the substance out of which early 78 RPM gramophone records were created. Such prey would be different kinds of listeners, ones for whom the sounds of the Arachnid Orchestra would be heralds of death.

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