Creativity is central to cultural production, but what makes certain producers more likely to innovate than others? To answer this question, we leverage original data on over 25,000 musical artists and 600,000 songs recorded and released between 1955 and 2000, using fine-grained musical features to construct a continuous measure of creative output (i.e., song novelty). We then examine whether and when musicians draw creative inspiration through the recombination of diverse ideas, or are instead stimulated by the creativity of their musical neighbors. We find evidence that both of these mechanisms in part explain an artist’s propensity to write and release novel songs, but in systematically different ways. Results suggest that the likelihood of generating novel ideas is influenced not only by direct interaction and collaboration with others, but also through indirect exposure via shared cultural, organizational, and geographic environments. Understanding when and how creative potential travels across these different “spheres of influence” sheds new light on the production of novelty in music and the social foundations of creativity more generally.