参考译文

Seismologists Find the World Quieted Down during Pandemic Lockdowns

地震学家新发现

Humans are a really noisy species: hammering and digging, flying and driving, delivering heavy cargo all over the world. And that activity creates seismic noise, which masks delicate signals from faraway small earthquakes.

人类是真的非常吵闹:敲打、挖掘、飞行、驾驶、向世界各地运送重物。这种活动会产生地震噪音，掩盖了遥远小地震的微妙信号。

Raphael De Plaen, a seismologist at the National Autonomous University of Mexico, compares listening for small earthquakes during normal times to sitting at a wedding, at a table far away from the band. You can’t really make out the music, because there are so many people laughing and talking in between you and the loudspeakers.

墨西哥国立自治大学的地震学家拉斐尔•德•普朗将平时听小地震的声音比作坐在婚礼上坐在远离乐队的桌子旁。你根本听不出音乐，因为在你和扩音器之间有很多人在说笑。

“And so now the lockdown is like coming during the rehearsal—no one is talking. So even though you’re far away, the speakers are loud enough for you to listen to all the songs and clearly identify them.”

所以现在的疫情封锁就像在排练时一样，没人说话。所以即使离得很远，扬声器的音量也足以让你听到所有的歌曲并清楚地识别它们。”

De Plaen says he and his colleagues have been able to detect “songs”— in this case, seismic signals—they didn’t even know existed. And now that they’ve identified those signals, they’ll be able to look back at decades of data and use these newly discovered seismic fingerprints to better identify small earthquakes like this in the past.

De Plaen说他和同事已经能够探测到“歌声”——在这种情况下，地震信号——他们甚至不知道这些信号的存在。而现在他们已经识别出了这些信号，并能够回顾几十年的数据。利用这些新发现的地震指纹来更好地识别过去类似的小地震。

The study, co-authored by more than 70 seismologists from around the world, appears in the journal Science.

这项研究由来自世界各地的70多名地震学家共同撰写，发表在《科学》杂志上

In addition to unmasking new seismic phenomena, the study also demonstrates how seismic data could be used to track human activity and movement—like traffic in a certain region, for example—and all without the privacy concerns that go along with cell-phone tracking.

除了揭示新的地震现象，这项研究还展示了地震数据是如何被用来追踪人类活动和——比如在某个特定地区的交通活动——同时，它没有手机追踪带来的隐私问题。

“By definition, what we are observing is already anonymous—there’s no way to actually know if John Doe has left his home to spend the night in another place.”

“根据定义，我们所观察到的已经是匿名的了——没有办法真正知道无名氏是否离开了他的家到另一个地方过夜。”

De Plaen points out that this finding may be one of the only positive things to come out of the global pandemic: the ability to better detect future earthquakes.

De Plaen指出，这一发现可能是这次全球大流行带来的唯一积极成果之一:能够更好地探测未来的地震。

听力原文

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