At this kindergarten in a community center in Bamako, the capital of Mali, children usually romp and play. But today, the focus is all about a sense of rhythm, informal learning and also cultural stereotypes.

Rainer Polak and Nori Jacoby from the Max Planck Institute for Empirical Aesthetics have rented the premises to research traditional dance and music in West Africa. They’ve engaged several groups of local professional artists. A drum ensemble with three musicians, two singers and several dancers are involved. All elements of this live session are recorded via multimedia. Video cameras capture the performance from several perspectives, and the membranes of all the drums have been fitted with sensors to directly pick up their mechanical vibrations. One of the dancers wears a motion-capture suit incorporating seventeen sensors, each of which is simultaneously recording her movements’ acceleration, rotation and magnetic field data. This allows the movement of the dancer in the room to be precisely calculated and, for instance, correlated with the rhythms played by the instrumentalists.

The researchers from the Institute in Frankfurt regularly collect such and other data in Mali and Bolivia – and for comparison, also in Germany, Bulgaria, the U.S., Great Britain and Uruguay. They’ve discovered that people from different cultures perceive identical rhythms differently. Do Africans have more “rhythm in their blood” than Europeans? Probably not. The decisive factor is the person’s cultural familiarity with the rhythm in question – in other words, whether they’ve unconsciously become familiarized with it in their customary social environment.
ON LOCATION