Sound science: recording and listening in the biology of bird song, 1880-1980

Stellingen
behorend bij het proefschrift

Sound Science
Recording and Listening in the Biology of Bird Song, 1880-1980

door Joeri Bruyninckx

1. During the twentieth century, ornithologists have repeatedly disqualified expert listening as a methodology for studying bird song in favor of mechanical instruments. They nevertheless persistently relied on their experienced ears to identify and interpret species behavior and distinguish patterns of analytical interest.

2. The directional microphone afforded the scientific recordist analytic control over natural sounds, by ordering the field's complex aural ecology into a selection of close-up segments. Its use promoted a noiseless and sterilized conception of the field.

3. Distinguishing between sound recordings' mimetic, didactic, mnemonic and alluring qualities shows how recordings consolidated as scientific objects not just because of their supposed objectivity or precision. As devices that helped to remember sounds, and instruct and attract a wide range of listeners, these recordings structured the study of bird sound in other ways too.

4. Commercial exchange and copyrighting of scientific data does not by definition jeopardize academic norms. By recognizing the alternative monetary, social and symbolic currencies of copyrighted sound recordings, ornithologists brokered a normative frame — a moral economy — for collaborations between commercial, amateur and scientific users of sound recordings.

5. Like the participant ethnographer, the historian may beneficially draw on first-hand experience. Demonstrations, apprenticeships, or re-enactments may subtly sensitize the researcher to how implicit, and thus easily overlooked routines and skills shape scientific practice.

6. The concept of tacit knowledge is closely related, but should not be reduced to bodily experience.

7. Scientific observation and representation are often multi-modal practices. Hearing and vision may not only mutually influence and complement each other, but also sort analogous effects. This invites us to re-examine the specificity of visualization in scientific practice.

8. Listening to the dawn chorus rising from a dark forest is a humbling experience that is not fully conveyed when playing a record at home. Inspiration usually requires getting one's boots dirty.

9. Musical records have variously been used to teach, communicate and liven up science amongst lay and expert audiences in disciplines as diverse as physics, biology and chemistry. Social scientists would do good to explore their potential as academic song writers, by joining the 'Guild of Scientific Troubadours'.

10. By expressing themselves in 'Dunglish', Flemish and Dutch scholars ultimately forget about their cultural differences.

Maastricht, 19 April 2013