

Podcasting 101

The sound of public engagement

With Marc Bragdon

Digital Pedagogy Librarian

Head, Harriet Irving Library Research Commons

mbragdon@unb.ca



What *isn't* podcasting?

- Audio from recorded or streaming live events (e.g. lectures and colloquia) intended originally for a live (captive) audience
- Pressing record, hitting stop, and uploading what you get
- Is a video podcast really a podcast?

Then what *is* it?

- An audio creation where you use sound as a story telling medium
- Leveraging the strengths and limitations (creative constraints) of audio

Light is constant



Sound is fleeting



Listening never stops



Seeing is optional





Vision is multi-directional

Sound draws you forever
toward its source





Reading is solitary

Speaking and listening is social





Digital Orality and Post-Literacy (and post-AI?)

“...so much is talk, so much is back-and-forthness, so much is information designed to be viral, memorable, repeatable”

UNB in 30

**Eel migration and habitat fragmentation
On the Wolastoq with Felix Eissenhauer**



EPISODE 25 →



UNB in 30

On the Wolastoq with PERCY SACOBIE

With: MARC BRAGDON



EPISODE 24 →



Make it personal

Science
AAAS

Podcast Episode

**Looking for life on an icy
moon, and feeling like a rat**

Science Magazine Podcast

- **Relate topics to your own experience,
in your own voice**
- **Follow conversations as much as scripts**
- ***Expect to practice***

Empathy and Pro-Social Behavior in Rats

Inbal Ben-Ami Bartal,¹ Jean Decety,^{1,2,4} Peggy Mason^{3,4}

Whereas human pro-social behavior is often driven by empathic concern for another, it is unclear whether nonprimate mammals experience a similar motivational state. To test for empathically motivated pro-social behavior in rodents, we placed a free rat in an arena with a cagemate trapped in a restrainer. After several sessions, the free rat learned to intentionally and quickly open the restrainer and free the cagemate. Rats did not open empty or object-containing restrainers. They freed cagemates even when social contact was prevented. When liberating a cagemate was pitted against chocolate contained within a second restrainer, rats opened both restrainers and typically shared the chocolate. Thus, rats behave pro-socially in response to a conspecific's distress, providing strong evidence for biological roots of empathically motivated helping behavior.

Pro-social behavior refers to actions that are intended to benefit another. One common motivator of pro-social behavior in humans is empathic concern: an other-oriented emotional response elicited by and congruent with the perceived welfare of an individual in

distress (1, 2). Sharing another's distress via emotional contagion can result in overwhelming fear and immobility unless one's own distress is down-regulated, thus allowing empathically driven pro-social behavior (3, 4). Building on observations of emotional contagion in rodents (5–10), we sought to determine whether rats are capable of empathically motivated helping behavior. We tested whether the presence of a trapped cagemate induces a pro-social motivational state in rats, leading them to open the restrainer door and liberate the cagemate.

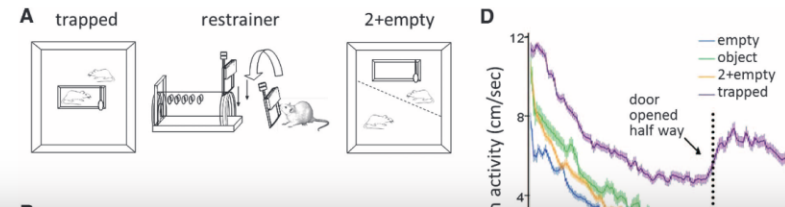
Rats were housed in pairs for 2 weeks before the start of testing. In each session, a rat (the free rat) was placed in an arena with a centrally located restrainer in which a cagemate was trapped (trapped condition, $n = 30$ rats, 6 females). The free rat could liberate the trapped rat by applying enough force to tip over the restrainer door (Fig. 1A). If a free rat failed to open the door, the experimenter opened it halfway, allowing the trapped rat to escape and preventing learned helplessness. Rats remained in the arena together for the final third of the session. Door-opening only counted as such if the free rat opened the door before the experimenter opened it halfway. Sessions were repeated for 12 days. Control conditions included testing a free rat with an empty restrainer (empty condition, $n = 20$ rats, 6 females) or toy rat-containing restrainer (object condition, $n = 8$ males). As an additional control, for the number of rats present, we tested a free rat with an empty restrainer and an unrestrained cagemate located across a perforated divide (2+empty condition, $n = 12$ males). Free rats' heads were marked and their movements were recorded with a top-mounted camera for offline analysis (11).

Free rats circled the restrainer, digging at it and biting it, and contacted the trapped rat through holes in the restrainer (Fig. 1B and movie S1). They learned to open the door and liberate the trapped cagemate within a mean of 6.9 ± 2.9 days. Free rats spent more time near the restrainer in

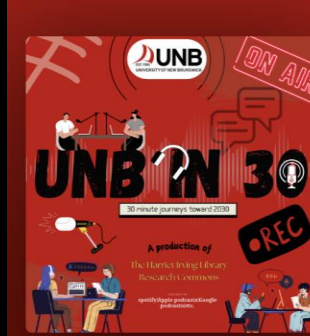
¹Department of Psychology, University of Chicago, Chicago, IL, USA. ²Department of Psychiatry and Behavioral Neuroscience, University of Chicago, Chicago, IL, USA. ³Department of Neurobiology, University of Chicago, Chicago, IL, USA. ⁴Committee on Neurobiology, University of Chicago, Chicago, IL, USA.

REPORTS

the arena center [$P < 0.001$, mixed model analysis (MMA), Fig. 1C] and showed greater movement speed (hereafter termed activity, $P < 0.001$, MMA, Fig. 1D) than did control rats. Before learning to open the restrainer door, free rats in the trapped condition stayed significantly more active in the second half of sessions relative to the first half than did rats in control conditions



Balancing concision and eloquence



Podcast

UNB in 30

Marc Bragdon

- Solo: Short, clear sentences
- Interviews / sound bites as conversations
 - *Be ruthless*: Minimize vocal distractions (um, erm, ah) / pauses / rambling / less engaging passages
 - Ask interview subjects to restate good answers that initially ramble to a good point



Podcast Episode

Subtitles On: Why is movie dialogue so hard to understand?

Twenty Thousand Hertz

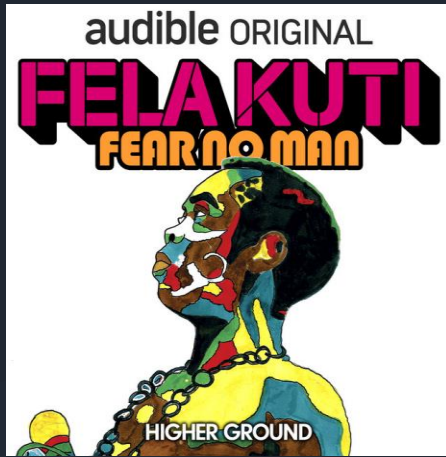
Control the flow

- Pause and set the stage; explicitly wrap up a section and introduce the next (“So...up to this point we’ve learned about the background of X, X’s motivations and X’s expectations, and next we’ll explore how X’s experience of Y has been shaped by these...”)
- Add music or sound effects that fade in / out between segments or reflect shifts in narrative tone



Sound planning

- Real and imagined settings, mood music and *evocative tonal effects* to accompany the script
- Balancing in situ field recording and post-recording sound design for directing listener focus



Credit where credit is due

- Producing
- Research / fact checking
- Writing
- Performance
- Recording
- Editing
- Original music
- Sound design
- Promotion

Content

A black and white photograph of a microphone on a stand, positioned over a computer keyboard. The microphone is a dynamic, handheld style with a mesh grille. The keyboard is visible in the lower left corner. The background is blurred, showing what appears to be a desk or office environment.

- What is the premise?
- What is the format (solo discourse / interview / roundtable / mix)?
- Who are you and where are you in this story?
- What are your podcast inspirations for content, format, editing, sound design, etc.?
- Who is the audience? What is the tone?

Delivery

- Choose a single location, consistent circumstances, and consistent technology (microphones, apps) for narration and interviews
- If home, pick a smaller space with soft surfaces (beds, curtains, carpets, etc.) to mitigate reverb.
- Have remote interviewees record under optimal circumstances (this will be relative)
- Practice your delivery, review, and develop the proper tone – this goes for narration AND interviews (workshop both)

Physics of Sound

- **Volume** (measured in decibels - *db*)
- **Dynamics** (range of intensity)
- **Frequency** (measured in hertz – *hz*,, *ranging through low* (bass), Mid, and High (treble))
- **Space** (direction and reverberation)



Recording guidelines

Audacity



GarageBand



Audio recording and editing correlates

Property of sound	Recording control	Editing control (Audacity)	Effect (when intentional)
Volume	Gain (microphone)	Volume /Amplification / Fade in and out	Focus
Dynamic range	Practice and intention	Compression / Normalization	Texture and Depth
Frequency	Practice and intention	Equalization (EQ)	Balance and Depth
Reverberation	Distance from microphone, size of space, textures and angles of surfaces	Reverb	Focus and Depth
Direction	Stereo / omnidirectional recording (microphone)	Panning	Focus, Balance, and Depth

Recording Technical Aspects

- Recording (Microphones):
 - Directional (shotgun or cardioid) vs omnidirectional
 - Mono (single source/signal) or Stereo (multiple sources/signals)
- Environment:
 - “Studio” – with sound isolation and dampening, not too cavernous, soft and/or angled surfaces
 - “Field” – Invest in (or borrow) a purpose-built (smartphone) microphone with a windscreen on the mic
- Application:
 - Audio software (desktop, phone app, or cloud) for (some) control

Microphone recommendations

- AudioTechnica (AT)2035 for studio recording
- Blue Yeti for studio recording
 - 4 directional settings
- Shure MV88 for field recording
 - Great mic, great app
 - Get a windscreen as well
- Rode Wireless Go for live events (good for filming too)

HIL RC Audio Studio:

<https://lib.unb.ca/researchcommons/audio-studio>

UNB Equipment Pool:

<https://www.unb.ca/fredericton/cetl/classrooms/equipment/equipment.html>



Recording hazards

- Reverb (sound bouncing around):
 - Easy to add, hard to subtract
 - More reverb suggests large spaces or distances; control through room/space textures and size of spaces and distance from microphone
- Gain (mic sensitivity / input volume)
 - Easy to boost, hard to refine overdriven recording (distorted)
 - Check levels prior to recording, err on the side of quiet (lower gain)
- Breathing and other unintended noises
 - Possible to mitigate during recording and/or editing
 - Cut script into breath-size chunks / lean back in between or when taking a breath
 - Record a separate track of room/space ambience to cover any de-amplification during editing, or copy "dead air passages" and paste in a separate covering track

Sounds design resources

- freesound.org | soundtrap.com | uppbeat.io | GarageBand | Ableton(Audio Studio)
- Copyright considerations and attribution



- Make and record your own music and sound effects
- Adobe Premiere Pro for post-recording audio enhancement:

https://lib.unb.ca/sites/default/files/media/documents/premiere_pro_audio_guide%20%281%29.pdf