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How academic podcasting can change academia and its relationship with society: A conversation and guide

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In this paper we explore the potential of academic podcasting to effect positive change within academia and between academia and society. Building on the concept of "epistemic living spaces," we consider how podcasting can change how we evaluate what is legitimate knowledge and methods for knowledge production, who has access to what privileges and power, the nature of our connections within academia and with other partners, and how we experience the constraints and opportunities of space and time. We conclude by offering a guide for others who are looking to develop their own academic podcasting projects and discuss the potential for podcasting to be formalized as a mainstream academic output. To listen to an abridged and annotated version of this paper, visit: https://soundcloud.com/conservechange/podcastinginacademia.

KEYWORDS

podcasting, academic podcasting, knowledge commons, science communication, environment

1. Introduction

Community identity and community building activities are central to academia's functionality. They shape learning and knowledge production goals, structure academic administration and funding, and facilitate institutional development that can support continued research and learning. Academic communities organize researchers, lecturers, students and administrators toward common values and activities. They thus play important roles in shaping the types of interactions, impact, and outreach that science has within and beyond them. Such communities further interface with funding agencies, government practitioners and civil society groups, shaping how, what, and why knowledge is produced, and how it is used in society.

Each academic community exists as a network of individuals and groups engaging in collaborations with each other and sometimes competing with each other as well. Freeth and Caniglia (2020) outline five dimensions of collaborative groups based on the concept of an epistemic living space, or the social structures and values that guide action (Felt and Fochler, 2011). There are five dimensions that impact the actions taken and outcomes achieved by a collaborative group that these authors highlight: epistemic, social, symbolic, spatial, and temporal. Assumptions about what is worth knowing and how knowledge could or should be produced is an essential feature of academia (1—epistemic). Relationship formation and ways of being together in our communities, interacting both physically and emotionally, influence the types of collaborations that emerge, and thus the outputs produced (2—social). Values, norms, and expectations create the symbolic organization of groups, establish power and position individuals (3—symbolic). Spaces, both physical and conceptual, enable and constrain collective efforts, and shape our sense of belonging in a community (4—spatial). Lastly, time constraints and temporal regimes structure community organization (5—temporal).

As essential as academic communities are, they also face challenges that prevent them from reaching their full potential such as burnout, depression, anxiety, and imposter syndrome; a lack of diversity and inclusion and high barriers to entry; and narrow criteria for professional advancement that can crowd out "extra-curricular" activities such as interdisciplinary work, outreach and science communication (De Rond and Miller, 2005; Evans et al., 2018; Maas et al., 2021). An underlying challenge is that academia is a composite of thousands of self-organized communities mostly relying on voluntary contributions, often from overburdened scientists with few incentives to spend time on service (e.g., peer reviewing articles, committee work). Establishing the values we want and fostering cultures of change is unlikely to occur without heroic individual efforts or sustained contributions from well organized groups of "frontrunners" (Loorbach and Rotmans, 2010).

Community change is additionally challenged by institutional lock-in to past incentives, organizing principles, institutions and outputs, as such shifts require substantial and time-consuming investments into addressing systemic issues (Pierson, 2000). Traditional community building activities remain standard practice for personal and professional academic advancement, with few new options or pathways for alternative engagement. These include, conference attendance, peer-reviewed journal and book publishing, and networking meetings, among others. However, these activities have limitations. They are maintained by high-prestige gatekeepers, restricted or limited in who can participate, are often spatially and temporally fixed events, and have historically lacked inclusion and diversity across career stages and geographies beyond Europe and North America, and among historically marginalized groups (Maas et al., 2021).

Given these challenges, new approaches for developing academic communities are needed. In this context, we argue that academic podcasting can contribute positively to academic community development and extend engagements between academia and other partners to fulfill the goals of a more transdisciplinary science (Brandt et al., 2013) in ways that bypass the institutional lock-in experienced by other traditional formats. Podcasts are audio media, sometimes with video accompaniment, featuring verbal communications in a variety of formats and styles, often produced with little administrative oversight and few barriers to entry. Podcasting has become an emerging medium within science (Picardi and Regina, 2008), where a diversity of producers and formats now participate (MacKenzie, 2019). Recent work in the field of critical podcast studies has shown that podcasting can be both a scholarly research tool (Kinkaid et al., 2020) and a method of dissemination that doesn't require a written text to establish rigor (SpokenWeb Archive of the Present., 2021). Some formats can offer researchers an opportunity to learn something new about their research subjects and engage with them in novel ways, while others focus on pedagogy and student learning. Podcast studies are examining what it means to have a voice and be heard, particularly with respect to openness, equality, and diversity, and to overcome obstacles to creating, learning, and listening (Llinares et al., 2018).

In this article, we draw on our own experiences as academic podcasters (see Supplementary material for a summary of podcasts led by the authors) as well as the growing literature on this topic to describe how academic podcasting can impact each of the five dimensions just discussed, and in so doing, redefine what it means to be an academic community. Following this, we provide a guide for future academic podcasters to use in developing their own projects.

2. Academic podcasting and community change

In this section we outline first the opportunities and then challenges podcasting can present with respect to promoting positive change within academia as well as between academic and non-academic partners. We do so by engaging with each of the five dimensions discussed in the previous section (Table 1).

2.1. Epistemic

Academic communities have epistemic positions, or norms and values about what counts and what matters. Epistemologies place value on the topics and activities of importance, and there are assumptions in those values about how knowledge should be produced and what constitutes valuable knowledge

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TABLE 1 Podcasting as a medium for change in academic life.

Features of academic communities	Opportunities	Challenges
Epistemic: Assumptions about which topics and activities are central, how knowledge should be produced and what constitutes good knowledge.	- New, potentially more inclusive knowledge production method	- Justifying use of time and money
	- Novel teaching and learning format	- Lack of evaluative criteria
	- Supports existing research and teaching activities	- Quality
	- The potential to be open about how academic knowledge is produced, the choices made along the way and the impact or lack of impact of that knowledge in society.	- Limited resources
		- Complementarity vs. openness
		- Professionalization
		- The risk associated with being open and vulnerable about academic knowledge production and how that could feed into the perception of science in society
Social: Different ways of being together in science. Relations with both peers and competitors. Emotional dynamics of research and community collaboration.	- Humanizing research(ers)	- Embracing new format
	- Sharing doubts and challenges	- Speaking openly and feeling vulnerable
	- Broadening social networks	- Comfort being recorded
	- Public, open conversations	- Community adoption and support
	- Broader engagement potential	- Niche establishment
	- A vehicle for self-reflection and personal growth	- Discomfort with being in the spotlight rather than presenting research itself.
Symbolic: Power differentials and how these manifest in implicit and explicit ways. How power dynamics shape values, norms, and expectations in science communities.	- Often open access with low or no barrier production, listening, engagement	- Gaining institutional support
	- Gatekeepers are self-appointed rather than appointed or elected on prestige or hierarchy	- Funding
	- High potential for content freedom	- Competing with traditional activities
	- High diversity and inclusion potential	- Potential lack of standardization, quality
	- Easy access to science	- Potential lack of credibility, due to existing power dynamics/lack of gatekeepers
	- Often led by early career scholars	
	- Alternate way for early-career researchers to gain a symbolic voice and short-circuit often rigid academic hierarchies	
Spatial: Ways in which different spaces enable or constrain research and science communities. Sense of belonging within a research community.	- Removes physical spatial barriers	- Listener engagement and feedback
	- Audio medium	- May exclude those who are not familiar with the technologies
	- Off computer engagement	
	- Access *via* portable devices	

(Continued)

TABLE 1 (Continued)

Features of academic communities	Opportunities	Challenges
Temporal: Different tempos, time regimes and forms of time in academic work.	- On-demand, quicker production, more regular engagement potential	- The patience required as a project builds an audience
	- Episodes can be engaged with at different times than articles (e.g., while exercising, commuting)	- Skill development
	- A distinct and limited time commitment can generate significant science communications/outreach impact that could be worthwhile for many academics.	- Regular outputs
		- The time it takes to create a podcast, do it well and the need for consistency over time which can place a lot of demands on both the individuals and the institution running the podcast.
		- Yet another demand on the severely limited time of often overworked academics that is not incentivized within the academic system.

Opportunities and challenges for how podcasting engages with each of the five dimensions of epistemic living spaces.

(Gieryn, 1999). Academic podcasting represents a novel knowledge production method in several ways. First, it is a medium for knowledge production and sharing that is often less formal than traditional outlets. It also allows participants to leverage skills and backgrounds that are often under-valued in traditional settings, such as spontaneity, creativity, as well as theater and sound production. Second, academic podcasting can complement existing practices by offering a mechanism to broaden impacts and promote outreach as a part of research projects. Third, podcasting is a highly portable medium that can be used in teaching and public engagement (Washko, 2021). Many students find podcasts to be more accessible than traditional journal articles that are not designed with teaching or engagement in mind, but are nevertheless assigned because these are the more familiar and accepted academic outputs.

A primary challenge that podcasting faces in shifting our epistemologies is that the formal training that academics receive through their PhD programs emphasize a narrow range of outputs. Academics internalize these goals and see them reflected in their formal incentive structures. Podcasting may be dismissed as being "extra-curricular," and something to only do once the usual boxes for career advancement are checked.

2.2. Social

Academic podcasting can offer new ways for researchers to have meaningful social interactions. As an interpersonal, verbal medium it helps to satisfy a basic human need for connection and sense of community. In doing so, it also offers a method for strengthening our social networks, which is inherently and instrumentally valuable. Podcasting can also strengthen emotional and empathic engagement with scientific topics through an emphasis on narrative, which can be absent in technical scientific writing.

A challenge that academic podcasting has in fulfilling its promise in this dimension lies partly in how verbal mediums are produced. For podcast guests and hosts, the fact that exchanges and thoughts are being recorded can crowd out some of the benefits of informal exchange. For hosts of a show, this can be addressed by continued practice and getting over our "activation energy" of anxiety and uncertainty, although this may be less available to guests of shows, who may feel additional pressure to perform well while on record.

2.3. Symbolic

Academic podcasting has the potential to upend some problematic aspects of traditional scholarly publishing and dissemination. The barriers to entry for all participants (guests, hosts, audience) are lower for podcasting than they are for other media. Most podcasts are "open access," offering free content to anyone with access to the internet. This contrasts with the increasingly problematic for-profit academic publishing model that relies on free academic labor and, for open-access publishing, charges expensive publishing fees (the journal Nature, for example, now charges over $11,000 for this option for a single paper and Global Environmental Change, a leading disciplinary journal, charges $5,150). As a new space, academic podcasting does not have as much of an issue with cultural and prestige-based biases that can otherwise crowd out more marginalized voices in our academic communities. Rather, academic podcasting has the potential to feature a more diverse range of voices, including those who might not be featured in traditional mediums (e.g., journals and conferences) due to their early career status, lack of notoriety in a field or lack of academic title.

While these are potential advantages, podcasting is not immune to existing biases. For example, a podcast in English may discriminate against a potential guest who speaks English as a second language if they are deemed not "articulate enough" for English-speaking audiences. Similarly, podcast hosts are gatekeepers to their productions and can influence content. Furthermore, some may be concerned that

a lack of peer review may lower the standard of content that is produced.

Finally, the open access model of scholarly podcasting means that there is usually little to no funding to support the production of content. This lack of funding makes it difficult to maintain a commitment to podcasting as it competes with more traditionally valued activities.

2.4. Spatial

Podcasting has enormous potential to foster community development within academic circles. This results from multiple dimensions we discuss here: the social connections that are formed (social), the increased accessibility of the medium (symbolic), and the more continuous nature of production (temporal). Part of this concerns the dimension of space itself: we can engage with audio in places that we cannot with other media, and it can be more easily integrated into our d routines (i.e., listening while commuting). Perhaps most importantly, podcasting has no spatial borders, and is only limited by internet access—allowing scholars to connect across the planet. As such, communities linked by podcasts have the potential to develop beyond those with whom we share workspaces to include those who share our ideas, inspiration, and values.

However, a challenge that podcasting faces in community development is how to make this connection genuine, and not be stuck in the asymmetries that typify most communication with little to no give and take. The nature of guest-based podcasting formats helps with this issue somewhat, but not entirely; there is still a performer-audience dynamic in this medium. One solution to this is to have listeners share questions or topic suggestions that they would like to hear discussed by podcasting hosts.

2.5. Temporal

Podcasting offers more regular informal access and engagement than traditional outlets. Many podcasts, for example, publish episodes as often as once a week. This allows for more continuity of engagement, which is important for building and maintaining a sense of community. This can also provide a benefit to podcasters who see their outputs put out more regularly, maintaining their motivation to continue creating content. Most podcasts last between 20 and 40 min (Podcasting Industry Stats, n.d.) and so can be consumed in less time than it can take to understand the intricacies of many academic articles. Listeners can also choose to download episodes and listen to them at their leisure.

A primary challenge related to time is simply how long it can take to build up a podcast project and gather an audience. This issue can be helped if the podcast builds on existing networks, but to some extent the point is for podcasting to be branching out beyond traditional structures. Additionally, post-production—i.e., editing—of podcast episodes is time-consuming, especially in cases where the episode requires more structure (e.g., a review of a topic or a narrative-based podcast vs. an interview).

3. A practical guide for potential scholarly podcasters

In this section we build on examples from several academic podcasting networks (see Copeland and McGregor, 2021, p. 57; Harrison and Loring, 2021) to enhance podcasting capacity in academia by offering a guide to new or potential scholarly podcasters. Based on Table 2, this guide leads the reader through several key decision-points that, from our own collective experiences, we believe are critical to conceiving, developing, and implementing a podcast. While we present these ideas linearly, we suggest that readers interested in starting their own project begin with the element that makes most sense to them. Each of the following sections also implicitly engages with the five interconnected dimensions of collaborative communities discussed in the previous section.

3.1. Motivations

Prior to undertaking a podcasting project, scholars should interrogate their reasons for choosing a podcast as a scholarly output or research tool. A lack of reflection about this can lead to podcast projects being started because it is fashionable to do so or because it checks a box that maybe does not need to be checked. In terms of reach, podcasting has important benefits for scholars, podcast collaborators (i.e., guests), the broader research community, and for the engagement between the academic community and other actors (see Table 2 for examples). If podcasting is intended as a research method (i.e., interviews with guests are used to build a qualitative dataset) vs. as a strategy to support grant applications as a research output, these motivations are likely to lead the podcast maker in different directions in terms of how the podcast is organized, aligned with the research project, or distributed.

Podcasting can also serve as a networking and professional development tool. Developing a research-related platform to engage a wide network of professionals and develop their own presentation skills may be a strong motivation, particularly for a research team or early-career researchers. Podcasts offer hosts and guests an opportunity to co-produce dynamic connections between ideas and novel intellectual paths explored through the format. Podcasts also offer guests a platform to highlight their own experiences, and if they are academics, share their research. In some cases, new insights can emerge during podcasting exchanges leading to new academic work. This can also occur in formats without guests, such as among hosts discussing a topic or paper.

Podcasters may also be motivated by intrinsic benefits. For example, podcasting may serve as a creative outlet free of the normal concerns that restrict behavior and outputs in traditional academic communities. Similarly, podcasting may offer an opportunity to humanize participants by supporting community development and social capital (i.e., social spaces) that are harder to generate in traditional media and formal interactions (e.g., conference talks). Similarly, the verbal medium of podcasting is live and therefore it is often less "packaged" into prescribed steps of content (e.g., methods, results, and discussion); it is less exclusive

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TABLE 2 Detailed guide for academic podcasting.

Key features of podcasting	Dimensions and questions for potential podcasters to consider
Goals and motivations	(1) Podcasting Goals—What *do*(es) the *podcaster*(s) want from their podcast?
	(a) Supporting fundamental research (podcasting as method)
	(b) Supporting grant applications and deliverables
	(c) Co-production and co-learning
	(d) Promoting own science
	(e) Networking and informal collaboration
	(f) Career and professional development
	(g) Inherent joy of creative exploration and human connection
	(2) Academic community—Who are you engaging, and in what space?
	(a) Podcast as educational resource
	(b) Diversify science
	(c) Academic community development
	(3) Extra-academic engagement—How does the podcast reach outside academia?
	(a) Science as storytelling
	(b) Teaching or science promotion
	(c) Science literacy and communication
	(d) Demonstrating societal impact
Format	(1) Inputs—What inputs do you have or need to support the podcast?
	(a) Money (e.g., equipment, hosting, travel, software)
	(b) Time (e.g., content creation, editing, skill development)
	(c) Expertise (interviewing skills, using hardware and software)
	(2) Outputs—What will your podcast and supporting materials look like?
	(a) Regularly scheduled episodes
	(b) Distinct series
	(c) Website
	(d) Blog
	(e) Social media presence
	(3) Style—What format or style will your podcast use, and what does it require?
	(a) Interviews (e.g., guests are the feature)
	(b) Discussions/talk show (e.g., hosts are feature, w/guests)
	(c) News or current science reporting/journalistic
	(d) Narrative building/story telling/thematic episodes
Relationships and Support	(1) Audience and niche—Who is your audience, and what scholarly niche will you fill?
	(a) Academic, practitioner, lay communities
	(b) Level of jargon vs. generality
	(2) Financial—What financial resources are available to support your podcast?
	(a) Self-funded/independent
	(b) Supported by institute or university
	(c) Listener supported (paid/donations)
	(d) Scientific society
	(e) Other 3rd party funding

(Continued)

TABLE 2 (Continued)

Key features of podcasting	Dimensions and questions for potential podcasters to consider
	(3) Technical—What technical resources are available to support your podcast?
	(a) Self-supported/independent
	(b) Supported by institute or university
	(c) Community or science association support
	(d) External service
	(4) Promotion and outreach—What resources are available to promote your podcast?
	(a) Independent
	(b) Supported by institute or university
	(c) Community or science association channels
	(d) Podcast networks
	(e) Crossover episodes

of the expression of personality. This gives potential podcasts an opportunity to bring more of themselves to their work, which may fulfill a reflexive desire or need.

Podcasts can also be used to diversify the voices that are heard in and from academia, both through the identities of the hosts and the guests. For researchers working with marginalized and/or underrepresented communities, or for whom they themselves are part of such communities, a podcast may be an appropriate medium to serve motivations around equity, inclusion, diversity, and accessibility. On an overarching level, podcasting benefits from being open access, which can enhance scientific literacy by removing accessibility barriers to science, and can often make science less esoteric, digestible, and humanized. As science communication and knowledge mobilization grow as priorities for scholars and funding agencies alike, the opportunities presented by podcasting to meet those knowledge sharing needs may be an excellent motivator for potential scholarly podcasters.

Takeaway: scholars should interrogate and define their motivations, and the audience served by those motivations, as a first step in planning a scholar podcast.

3.2. Format

Within podcasting, formats can vary widely. Scholars should ask themselves, "how do I want my podcast to sound?" and "what format best fits my motivations?" Podcast formats can include interview-based (structured or unstructured), discussions among co-hosts and guests (i.e., talk show style), news or science reporting, or thematic storytelling/narrative approaches. As most podcasts produce a series, multiple series, or have regular episodes along with supporting materials such as a website or social media engagement, scholars should carefully consider the time investment they are able to make into a scholarly podcast project. Different format styles will require different amounts of editing time, time spent recruiting guests, or even time spent coordinating hosts. For example, an interview with a single guest may require little editing while a storytelling style may require multiple interviews, voice overs and music to be recorded and edited together.

On the other hand, podcast formats and styles are not restricted in length or content as compared to other academic mediums such as journal publishing (e.g., word counts, peer-review, and editorial discretion) or conferences (e.g., acceptance, financial and physical access). Therefore, scholarly podcasters may find the medium freeing, and the time investment comparable to the benefits derived from more traditional publication.

Takeaway: scholars should choose their podcast format carefully, giving thought to the amount of creative freedom they wish to exercise and the time investment required by their format choices.

3.3. Relationships and support

Academic podcasting projects need to consider the relationships that they have with their audience, institutions, and potential funders. In identifying the intended recipient of such benefits, scholars should ask themselves, "who is my audience?" Similarly, potential podcasters should also think about the scholarly (or other) niche they want to fill. They might ask, "What space does my podcast fill within academia and between academia and other spaces?" Deciding the niche can guide podcasters on how to write their podcast (i.e., avoiding jargon), or how they will frame key ideas well to connect with their desired audience(s).

There is also the question of funding, which we encourage potential podcasters to consider early in their podcast development. Compared to standard scientific research, podcasting can be done inexpensively, although equipment, hosting and time factors need to be considered. We suggest that podcasters consider several possible sources of funding and other needed support (i.e., space, distribution capacity). Small podcasts, particularly those that fill a particular scholarly niche, will likely struggle to find financial support from listeners, and crowdsourcing funds is another demand on scholar's time.

To address these challenges, podcasters should look to other options, such as institutional affiliations, where they are more likely to find in-kind support, such as technical assistance (recording spaces and equipment, software) rather than financial assistance. Institutions may also offer the opportunity to promote a podcast through their own channels (e.g., through newsletters and emails to members or students). This is an important contribution to podcasting efforts, which scholars should consider if they are not previously in the habit of self-promoting their own work beyond traditional academic spheres. Relatedly, new podcasters can consider joining podcast networks to seek support and camaraderie with other scholarly podcast producers, as well as to benefit from finding support in established distribution networks.

Takeaway: podcasters should consider the niche their podcast will fill, and the time and resources they have available (or could seek out) to support their efforts.

4. Outlook

We believe it is important for academic podcasting to continue to grow and establish itself. With this growth there are several questions, including, how formal or informal should this process become? One possible path forward is for institutions of higher education to create their own podcasts, more from the top-down, rather than through grassroots efforts. Formalization can also mean becoming more accepted as an academic output. This may enable more recognition (e.g., funding, capacity) and support (e.g., career advancement opportunities), but likely involves a trade-off as we gain consistency and transparent rigor but lose creativity and diversity to meet the chosen metrics and standards. As podcasting develops, it will be important for participants to maintain a sense of intrinsic motivation, which is fostered by not overly worrying about formal metrics, being present for each other and for guests, and incrementally building a sense of shared purpose and efficacy (see Ryan and Deci, 2018).

A main take-away from our perspective is that podcasts can serve multiple benefits. Some of these relate to the fact that it is a spoken, conversational medium, and thereby represents the single most natural way for people to engage with each other, which has obvious benefits for community development. No other medium can fully replicate this function. Beyond this inherent benefit, we have suggested that there are multiple ways in which podcasts can be used to promote community goals, some of which may not be obvious to future academic podcasters, including the use of podcasting as a research method and instructional tool in the classroom. We believe that for academics, podcasting can serve thus as a bridge between multiple aspects of valid and meaningful work and help to meet what is, perhaps, the greatest challenge that we face in developing new approaches and investing in our communities, which is the scarcity of our own time and attention. While academic podcasting cannot fully address this, representing as it does an additional request for time and attention, it does so in a way that still represents a refreshing departure from the norm. We need to remember that, by participating in academic podcasting, we are engaging with a unique platform that presents an opportunity to confront persistent barriers to broader social goals within academia and effect positive change between academia and society.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study involving human participants in accordance with the local legislation and institutional requirements. Written informed consent to participate in this study was not required from the participants in accordance with the national legislation and the institutional requirements.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fcomm.2023.1090112/full#supplementary-material

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