



## Podcasting in and for teaching

A. Lasch \*

*Professor of German Linguistics and History of Language, Institute of German Studies, Faculty SLK, TU Dresden (TUD)*

### Abstract

This short paper is intended as a workshop report, in which experiences from academic teaching are shared. The focus is on possibilities of low-threshold podcast production and hosting, as well as their integration into teaching. For this purpose, three podcasts with different goals and addressees are presented in order to illustrate how these media-specific formats are interconnected and can be made fruitful as a possible form of dissemination for science communication and in the context of Citizen Sciences.

Der Artikel versteht sich als ein Werkstattbericht, in dem über Erfahrungen aus der akademischen Lehre berichtet wird. Im Mittelpunkt stehen Möglichkeiten der niederschweligen Podcastproduktion und des -hostings, sowie deren die Einbindung in die Lehre. Dazu werden drei Podcasts mit unterschiedlichen Zielen und Adressat:innenkreisen vorgestellt, um zu illustrieren, wie diese medial spezifischen Formate miteinander vernetzt sind und sich als eine mögliche Form der Dissemination zur Wissenschaftskommunikation und im Kontext von Citizen Sciences fruchtbar machen lassen.

\*Corresponding author: [alexander.lasch@tu-dresden.de](mailto:alexander.lasch@tu-dresden.de)

This article was originally submitted in German.

## 1. Starting points

Due to pandemic conditions, podcasts, which had a first strong boom at the end of the 2000s, also experienced a second spring in (higher) education. Receptively, they are now part of the inventory of digitally supported teaching (cf. [1] Blume 2022: 96f.), but productively, also for [science communication](#), they are still rarely used ([2] WiD, DZHW, NaWik 2021: 12). Podcasts are thus neither a new (cf. [3] Nölting, Schnekenburger & Tavangarian 2006), nor a particularly innovative means of addressing content to a heterogeneous audience - however, they have never been as easy to produce, host and network as they are today. This can make them a very valuable element of academic teaching: Podcasts can be used (asynchronously) to (a) convey knowledge content, (b) document student presentations, and (c) make teaching as well as research projects visible. In the article (2) a low-threshold form of podcast production and hosting is presented briefly and exemplarily. Subsequently, (3) three podcasts representing the above-mentioned three aspects will be brought into focus. Special attention is paid to how these media-specific forms (4) are interconnected (cf. [4] Brittain et al. 2006), and how podcasting can be fruitful as a possible form of dissemination for science communication and in the context of Citizen Sciences.

Linguistics describes the term "podcast" as a "portmanteau", namely from "broadcast" on the one hand and "pod", an acronym for "play on demand", on the other - commonly they are thematically bound audio recordings, which, designed for subscription and continuation, are offered online via RSS (Rich Site Summary) in a web feed for an unspecified audience. Before asking how useful, for example, audio recordings of courses without an associated presentation might be, it is worth considering the advantages that podcasting offers. Podcasts can be used asynchronously and can be received without requiring attention on the visual perception channel. Even more, asynchronous audio input can be used in any type of knowledge delivery without tying the recipient:s to a visual output device such as a display on a smartphone, tablet or computer. The transmission is more data-friendly; the provi-

sion options are diverse and technically mature, ranging from self-operated blogs to commercial hosting services. Distribution via RSS is not platform-bound. Even without video support, podcasts are used to open up new subject areas -- this also applies to academic teaching. Students can also receive podcasts in order to repeat and consolidate central contents of a field of knowledge, to follow up courses and to prepare exams. The question, e.g., of the Dresden student body, about asynchronous provision of teaching content could easily be answered with podcasts.

## 2. Podcasts: production and hosting

The number of options for podcast production and hosting increased significantly in recent years; in this article, production with OcenAudio (see Fig. 1) and hosting via Castbox (see Fig. 2) are briefly presented, with special attention paid to the fact that existing (and, for example, pandemic) video recordings can also be appropriately edited and re-injected (see Section 3). Distribution can be done via Castbox and additional podcast platforms (Spotify in the example, see Fig. 3). In the following section, these aspects of production and hosting as well as the exemplary workflow, which in principle is no different even with alternative tools, are first outlined, and then described in more detail in section 3 using exemplary podcasts. It should be emphasized that although the technical options are subject to change, especially for already existing media formats (such as lecture recordings) the conversion (from MP4 to MP3) and the renewed provision (via RSS) will not change in principle in the foreseeable future. However, the presented tools can be replaced by others as desired.

Podcasts are now probably the easiest and cheapest medium to use for teaching, enabling asynchronous knowledge transfer as well as the presentation and documentation of student work. Furthermore, they are relevant for courses of study with few students, highly specialized research contexts, or special interests in general, since podcasts can also be used to make topics accessible to an audience that tend to lie outside of the public interest and would rarely reach a broad audience in a presence.



Fig. 1: Production via ocenaudio (<https://www.ocenaudio.com/>). Ocenaudio is an easy-to-use audio editing program and freely available for Windows, MacOS and Linux.

Ocenaudio (see Fig. 1) is currently one of the easiest to use and freely available recording, converting and editing environments for audio content. Recording, converting, editing, fading or normalizing can be done intuitively and easily in this WYSIWYG editor. Exporting can be done to the most common formats, including MP3 and MP4 (or M4A) without installing additional Codex packages. Since Castbox accepts WAV and AAC formats as well as the more data-friendly MP3 and MP4 (or M4A) up to a maximum file size of 400 megabytes, working with Ocenaudio forms an excellent basis. The only disadvantage of Ocenaudio compared to other programs of this kind (such as Audacity) is that it does not have a multi-track editor. With a little practice and the blending of separate audio content, this shortcoming can be easily compensated.

Registration and use of the hosting service Castbox (see Fig. 2) is free of charge - here we play our audio content produced in Ocenaudio as episodes into a podcast, which is called a "channel" at Castbox. Of course, other services for hosting would also be conceivable, however I have had very good experiences with them - also and especially in academic teaching. First, it is relevant that no separate program (as with Ocenaudio) is necessary; Castbox works browser-based. Secondly, the number of channels, i.e. podcasts, is not limited, nor is the number of episodes per channel. Thirdly, Castbox creates an RSS feed that can be embedded and reused in all other environments. Thus, Castbox supports sharing with services such as Spotify, Apple and Google Podcasts - just to name a few.

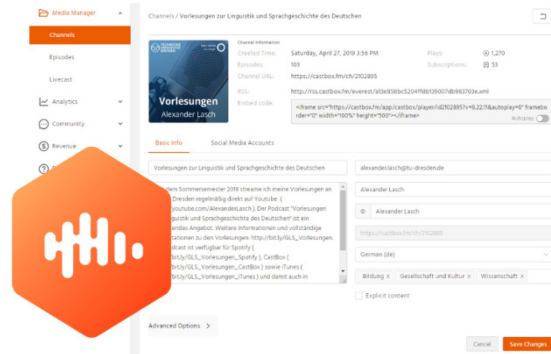


Fig. 2: Hosting via castbox.fm (<https://castbox.fm/>). The service is easy to use and browser-based. Podcasts have their own page; claiming is supported. Broadcasting & recording is possible via an app for iOS and Android.

Fourth, each channel has its own landing page that can be accessed via URL. An appealing web player, fifthly, can be embedded on websites and blogs via iframe. The announcement with Podcastportalen (e.g. <https://www.podcast.de/>) takes place however manually via RSS feed and does not belong to the scope of supply of Castbox. It should also be mentioned in passing that episodes can be added to the channel at any time via the Castbox app for iOS and Android. But back to the workflow: The audio file produced in Ocenaudio is added as an episode to a created channel via drag & drop. A channel thumbnail, the preview image that makes the channel easily recognizable, must be created beforehand and is then automatically applied to the episode assigned to the channel. Due to memory limitations for Apple's iPod, for a long time a resolution of 1,400x1,400 pixels was defined for the thumbnail, and the total file size could not exceed 400 kilobytes - Apple's podcast platform refused the thumbnail otherwise. However, these regulations have been gradually softened, but it is still advisable not to lose sight of them completely and to use these parameters as a guide when creating thumbnails. After uploading, various other options are available (specifying title, description with 'talking links', specifying publishing dates). The workflow can be followed step by step in a podcasting tutorial (<https://youtu.be/8xDtUXQ4Tb8?t=583>).

Claiming podcasts, that is, displaying podcasts and their authorship on podcast portals, is useful for making created content easily accessible to a wide audience in a professional environment.

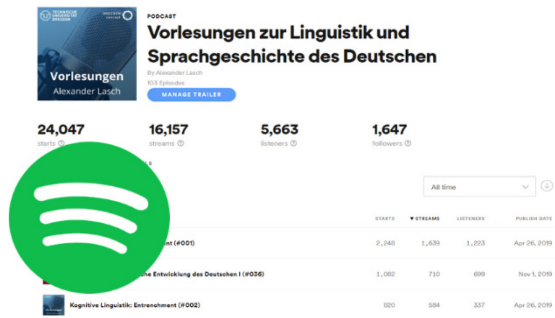


Fig. 3: Sharing e.g. via Spotify (<https://podcasts.spotify.com/>): Castbox.fm provides RSS feed and web player. A broader audience can also be reached via podcast platforms.

As with the well-known "podcast" portal (e.g. <https://www.podcast.de/>), the podcast already publicly available on Castbox must be reported manually by specifying the RSS feed. This is possible even if one is not responsible for the podcast. With claiming, one claims ownership of a podcast to a portal. To name four major portals, this can be done, for example, with Spotify (<https://open.spotify.com/>), Apple (<https://www.apple.com/de/apple-podcasts/>), Google (<https://podcasts.google.com/>) or Amazon (<https://www.audible.de/>). The procedure is almost identical for all services, but must be done separately for each, as I would like to illustrate in the next section using a podcast as an example. For me, the focus is on the podcast portal of Spotify (see Fig. 3), since this service has become increasingly popular in recent years. It should be explicitly pointed out that commercial providers and portals may at first glance only offer a further possibility of distribution and thus of finding produced content, but at second glance they are also interesting for producers because they allow an insight into usage statistics that would not be possible at all with hosting on a blog or website.

### 3. Three examples: Lectures on Linguistics and Linguistic History of German, lasch not least, Old Writings.

The low-threshold production and distribution possibilities make podcasts an ideal means for (a) conveying knowledge content in academic teaching (using the example of the "Lectures on Linguistics and the History of German"), (b)

documenting student presentations (using the example of "lasch not least"), and (c) making teaching and research projects visible (using the example of "Alte Schriften"). For these three examples of use, I will also include usage statistics that are not usually disclosed, although I will only provide a detailed insight for the "lectures" (see Fig. 4).

I would like to illustrate two things with this: First, how extraordinarily platform-dependent the use of an offering is, and second, that production effort and usage potential do not always have to be in balance - this will become immediately clear with the podcasts "lasch not least" and "Alte Schriften," for which I will only consider figures from Spotify.

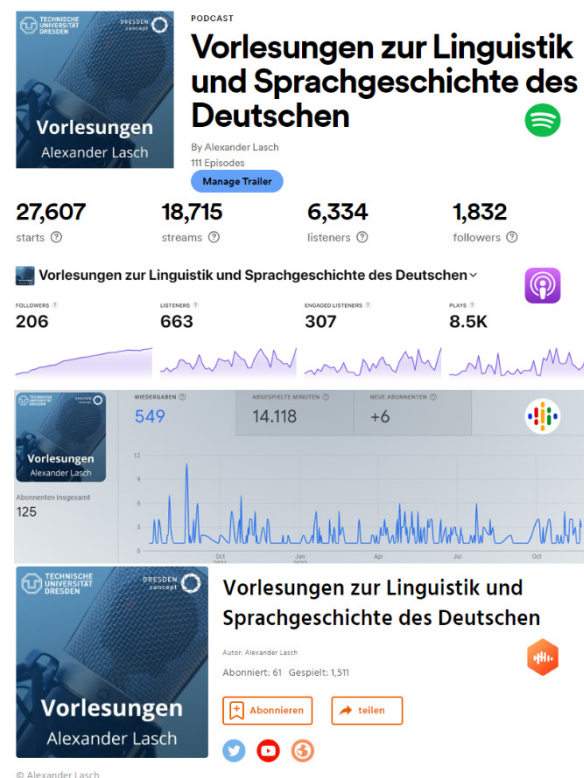


Fig. 4: Usage statistics of the podcast "Vorlesungen zur Linguistik und Sprachgeschichte des Deutschen" on Spotify, Apple, Google and Castbox (date: 23.11.2022). High-resolution variant of the graph at: <https://doi.org/10.5281/zenodo.7351269>.

Looking at the usage statistics (see Fig. 4), one will be able to say without hesitation that Spotify, as a commercial podcast portal for the distribution of content, is far superior to all other portals in terms of reach and usage - the "podcast" portal (<https://www.podcast.de/>), here the networking of content in the German-speaking region began, is not included in the

representation because of four followers, nor is Amazon (<https://www.audible.de/>), for which the usage figures are also negligible. Even if the statistics cannot be precisely mapped to each other (the differentiation between "start" and "stream" at Spotify, for example, does not exist at the other portals, etc.), it is obvious that a broader audience can be reached if different distribution channels are used. For example, the hosting service Castbox, which provides the basis for further use, is not nearly as wide-reaching as the portals that embedded podcasts early on along with other audio offerings (Spotify and Apple).

The effort for the production of the podcast "Vorlesungen zur Linguistik und Sprachgeschichte des Deutschen" (<https://kurzelinks.de/itd6>) is extraordinarily low - it is the audio tracks of the recordings of the Youtube livestreams (<https://kurzelinks.de/xt5e>) of the lectures, which are available as MP4 after broadcast, normalized and shortened in Ocenaudio, converted to MP3 and recorded at Castbox. The post-production is therefore limited to minimal optimizations: Nothing is dubbed, nothing is glossed over. Everything that goes 'on tape' in the lecture is also unfiltered content of the podcast. With the one-time claiming of the podcast (e.g. in the case of Spotify via <https://podcasters.spotify.com/catalog> under the indication of the associated RSS feed of Castbox, see Fig. 2), the episode is also accessible a few minutes later via Spotify, Apple, Google or Audible (Amazon). The lecture presentations are available independently of the video stream and podcast in a blog, which is explicitly referred to in the description of each podcast episode, e.g. in the last episode (<https://kurzelinks.de/dvin>): "Beispielanalyse des 'Erlkönigs' aus Perspektive der Kognitiven Poetik. Lecture 'Cognitive Linguistics' in WiSe 2022 at the TU Dresden. Information & material: <https://kurzelinks.de/fl7f>. Video recordings: <https://youtube.com/@AlexanderLasch>. Intro: 'Reflections' by Scott Holmes (CC BY via [FMA](https://www.fma.de/)). #linguistics #OER #language".

Even if one could follow the lecture directly on Youtube (live and recorded), more than 1,800 followers, e.g. on Spotify, obviously do not or not exclusively do so. For them, the offer opens up very different usage options, as is clear from (unfortunately very rare) letters: "In

one of your current lectures, you asked a bit in amazement who actually listens to the lecture on Spotify. As a student of German Studies at the University of Duisburg-Essen, I basically listen to your lectures like a podcast on car trips, on the train or while walking. I came across you in the course of your lecture on colonial linguistics, which I listened to with enthusiasm." Thus, repurposing an already existing offering and opening up additional distribution channels makes it possible to address a broader audience. By expanding the OER portfolio, one not only contributes to the digital transformation of the knowledge society, but can also promote one's own subject, the favored subject content, the science location Dresden, and the opening of the science culture (cf. [5] Lasch 2021). The fact that video recordings, which, due to the pandemic, have offered many lecturers a good opportunity to convey knowledge asynchronously, can be transferred into podcast formats either via manual conversion or, in the case of YouTube, by using the download of audio tracks via instances of Invidious (<https://invidious.io/>), should therefore be explicitly emphasized once again as an option.

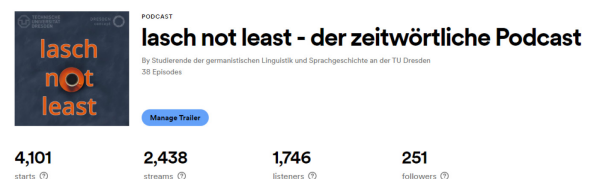


Fig. 5: Usage statistics of the student podcast "lasch not least" on Spotify (<https://podcasters.spotify.com/>, date: 23.11.2022).

The podcast "lasch not least" (<https://kurzelinks.de/x4zf>) is a student podcast that is created collaboratively in seminar contexts and used for teaching - the logo and name of the podcast as well as the intro were developed together with students. In a total of 37 thematic episodes on the topics of "Accessible Communication", "Morphology", "Cognitive Grammar", "Internet Linguistics", "Colonial Linguistics", "Small Text Forms", "Grammars of German" and "Auxiliary", students present the results of their joint work on a topic, Depending on the learning goals they have set themselves for the course, they either take the production and hosting into their own hands - with

technical support in the context of the course they are attending - or simply take care of the elaboration and produce with support. The effort that goes into each episode produced specifically for the podcast is much greater than for the "lectures." However, the significantly higher effort does not correspond with the call-up figures - for the implementation of teaching and learning projects, this should never be relevant, and this can also be argued accordingly after evaluating usage statistics. For: students have the opportunity in courses to practice a digital presentation technique, to reflect on the possibilities and limits of the technology, to consider its use in other contexts, and to make their elaborations, often as #OER with a CC-BY license accessible to a wider public. Knowing that your voice will be heard for the first time on Spotify, Apple, or Google Podcasts is an incentive for many (but by no means for all), and it certainly helps to raise the quality of a topic's presentation.

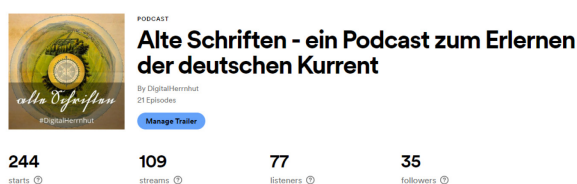


Fig. 6: Usage statistics of the project podcast "Ancient Writings" on Spotify (<https://podcasters.spotify.com/>, date: 23.11.2022 ).

The project podcast "Alte Schriften" (<https://kurzelinks.de/l3p4>) can stand for the third purpose of podcasts for and in academic teaching. It includes handwritten sources and is therefore directly linked to manuscript digitisations on sachsen.digital (<https://sachsen.digital/>). It enables, with accompanying offers and self-learning courses, a low-threshold learning of the so-called German Kurrent(schrift), is thematically closely linked to the work in the Moravian Knowledge Network (MKN), supports the research efforts in the context of the virTUos project "Digital Herrnhut" (<https://tu-dresden.de/gsw/virtuos>) and finally builds the bridge to Citizen Science. Of the three exemplary podcasts, it is certainly the most elaborate in production and reaches only a very, very small audience, which is largely due to the very specific cut of the podcast. Nevertheless, it is an important tool for

the MKN: numerous sources of Herrnhuterian provenance from the 18th and 19th centuries are exclusively available in handwritten form and must be gradually made accessible in order to develop them as the basis of various research subjects (cf. in detail [6] Lasch, Hetjens, Schuppe 2022). For the reading of the sources, readers have to be identified, who are often already active as volunteers in Citizen Science projects of the SLUB, but at the same time are only in rare exceptional cases able to produce an episode for a podcast. The production of each episode of the podcast requires the cooperation and collaboration of different actors with different competencies and is a considerable coordination challenge, which, as is to be expected with the special design, is not reflected in the call-up figures of the podcast. As an asynchronously provided OER, however, not all usage scenarios and distribution possibilities have been explored yet, which will arise in the future, e.g. in international cooperation.

#### 4. Networking and science communication

All three podcasts serve not only to provide knowledge content for teaching asynchronously for a closed circle of addressees, but also to a broader public. In any case, podcasts reach a broad audience, which makes not only the university location Dresden, but also the topics covered in the podcasts better known. Ideally, new incentives even arise directly in teaching or in Citizen Science contexts for more in-depth engagement with a topic or how to make it available digitally supported asynchronously - in teaching and learning scenarios, this can also be a learning objective. For science communication, it is further very helpful that each of the podcasts presented here is closely related to a specific blog, because they are enhanced, extended podcasts (<https://www.e-teaching.org/didaktik/gestaltung/ton/podcast>). The podcast on lectures is interlocked with the blog of the Chair of Germanic Linguistics and Language History (<https://www.gls-dresden.de/tag/podcast-vorlesung/>) in order to clearly compile (as of April 2019) presentation material, organizational information, sample exams, and video recordings. The pandemic-driven student podcast "lasch not least" has also been expanded

to include presentation materials and partly refers to video recordings; it is also closely linked to the professorship's blog. However, individual topics are additionally prepared specifically for the blog "lingdrafts - Linguistic Workshop Reports" (such as the presentation of the podcast itself <https://lingdrafts.hypotheses.org/1837>). The same is true for the project podcast "Alte Schriften" (<https://lingdrafts.hypotheses.org/2000>), which is furthermore, however, closely linked to the blog of the Moravian Knowledge Network (MKN) (<https://dhh.hypotheses.org/>) and is also used here as OER in other digital environments - such as the virtual model of the sisters' house Kleinwelka ([7] Hetjens et al. 2022).

## 5. Outlook

Podcasts are neither a new nor a particularly creative means of, on their own, opening up topics and making them available to a wide audience asynchronously. However, production and hosting have never been easier, and much content already produced, such as video recordings of lectures, can be fed into enhanced podcasts in an alternative distribution channel that opens up new usage scenarios. The workflow presented here does not change in principle, especially when using existing video recordings, even if other software solutions are favored.

Besides the further use of already existing recordings, podcasts can be used on the other hand as a tool for presentation, as a learning tool to practice the digitally supported presentation of elaborated topics. Thirdly, they can be used to establish specific research subjects, to make research visible and, above all, more audible, and to better connect to Citizen Science projects, if this is thematically possible. They are therefore to be understood as a means in knowledge transfer as well as science communication and always open up new possibilities for involvement and further development.

## Literature

- [1] Blume B. 2022. teaching German digitally. From didactic framework to practical implementation. Weinheim.
- [2] Wissenschaft im Dialog (WiD), German Center for Higher Education and Science Research (DZHW), National Institute for Science Communication (NaWik).

- 2021. science communication in Germany. Results of a survey among scientists. Berlin, Karlsruhe.
- [3] Nölting K, Schnekenburger C C & Tavangarian D. 2006. audio ergo sum - the new form of learning audio learning. In: Rensing C (ed.). Proceedings of the Pre-Conference Workshops of the 4th e-Learning Fachtagung Information. DeLFI 2006. Berlin, 65-72.
- [4] Brittain S et al. 2006. Podcasting lectures. Formative evaluation strategies helped identify a solution to a learning dilemma. In: Formamente, 77-93 (<https://kurzelinks.de/ab31>, 11/22/2022).
- [5] Lasch A. 2021. (Science) Culture of Digitality. In: Lessons Learned 1. DOI: <https://doi.org/10.25369/ll.v1i1/2.27>.
- [6] Lasch A, Hetjens D, Schuppe, R C. 2022. DigitalHerrnhut. New approaches to historical linguistics through digitally supported learning environments - a workshop report. In: Meier J (ed.). Language history and education. Berlin, Boston, 129-146.
- [7] Hetjens D et al. 2022. virtual excursion Kleinwelka. In: Lessons Learned 2. DOI: <https://doi.org/10.25369/ll.v2i1.39>.