

III.3.2 in Vienna and headed by Paul Lazarsfeld, who later became a major figure in American sociology after his emigration to New York.³¹ The RAVAG had commissioned this Center of Economic-Psychological Research to run a statistical survey of the tastes of Austrian radio listeners. The innovative aspect of the **RAVAG study**, conducted in 1931/32, was not so much the quantitative measurement of listeners' wishes, but rather the fact that it provided information on the likes and dislikes of various social groups. By correlating radio programs with social data, the final report broke down the mass audience into specific target groups. This is one beginning of what is called "profiling" today and what might be appreciated or rejected as **management of the freedom to communicate**.³²

III.3.3 & Fig. 120, p. 280

3. Data Model and Infrastructure

In the first two parts of this introduction, I mainly discussed the website's front end, i.e., issues related to the interface. On the other side of the software stack, however, its back end is located; invisible to the users, it is a database in which all the content is stored. What I would like to stress here is that deciding which entities are included in the database and how they are related is a genuinely methodological matter. In order to build a scholarly website, the research approach needs to be operationalized; at least working definitions of the central concepts are necessary. In a project within the field of cultural and media studies, this work definitely cannot be conducted by software engineers alone, because: "The database is the theory!"³³ If a website is

- 31 See Desmond Mark (ed.): *Paul Lazarsfelds Wiener RAVAG-Studie 1932. Der Beginn der modernen Rundfunkforschung*, Vienna: Guthmann-Peterson 1996.
- 32 On the history of digital profiling, see Colin Koopman: *How We Became Our Data. A Genealogy of the Informational Person*, Chicago/London: University of Chicago Press 2019, and Andreas Bernard: *The Triumph of Profiling. The Self in Digital Culture*, trans. Valentine A. Pakis, Cambridge: Polity 2019 [German 2017].
- 33 Jean Bauer: "Who You Calling Untheoretical?," in: *Journal of Digital Humanities*, 1/1 (2011), URL: journalofdigitalhumanities.org/1-1/who-you-calling-untheoretical-by-jean-bauer.

Fig. 6, p. 38

supposed to match up to the complexities of the theoretical approaches that are guiding cultural and media research, both its back end and its front end must be developed in a truly interdisciplinary dialogue with programmers and designers. Hence, the following paragraphs will deal with the **data model** on which the Topology module of *Campus Medius* is based.

I start with the entity at the top of the diagram, the *mediator* as anyone or anything given in an experience that makes a difference to the course of action. In our terminology, a *medium* is none other than a type of mediators: Starhemberg appears on the stage of the “Turks Deliverance Celebration” as federal leader of the Austrian Homeland Protection, but ideally aligns himself with leader figures ranging from the Roman Caesars via the Habsburg emperors to the Fascist *Duce*. This is an example of a one-to-many relationship, with one medium constituted from many mediators. It was important for us to attach the attributes *space*, *time*, and *value*—the latter understood in terms of weighing the nodes in a network—to the *relation*, which connects two mediators, and not to the mediator itself.³⁴ The common practice in digital cartography, however, is to determine where and when an entity occurs, i.e., to set its location (latitude/longitude) and its date and time. Yet this approach would have required a kind of transcendent gaze, an external perspective able to situate mediators in absolute time and space. In order to avoid this “god trick of seeing everything from nowhere,”³⁵ we have conceptualized space, time, and value relationally, in other words as differences in the network of mediators.³⁶

34 The selection of space, time, and value as relational properties is based on Foucault’s analysis of power relations, especially his precise description of spatial distributions, temporal orders, and evaluative rankings. See Michel Foucault: *Discipline and Punish. The Birth of the Prison*, trans. Alan Sheridan, New York: Vintage Books 1995 [French 1975], pp. 135–228.

35 Donna Haraway: “Situated Knowledges. The Science Question in Feminism and the Privilege of Partial Perspective,” in: *Feminist Studies*, 14/3 (1988), pp. 575–599, here p. 581.

36 The transcendent position is implemented in the Topology of *Campus Medius* as a deliberate, additional mediator of the mediation “How to Use Reason: Sovereign Signs” (see chap. III.1). In the website’s database, its number is 0 and its name is “God” (see fig. 5, p. 34). The other two mediations are realized immanently, that is, without an external perspective.

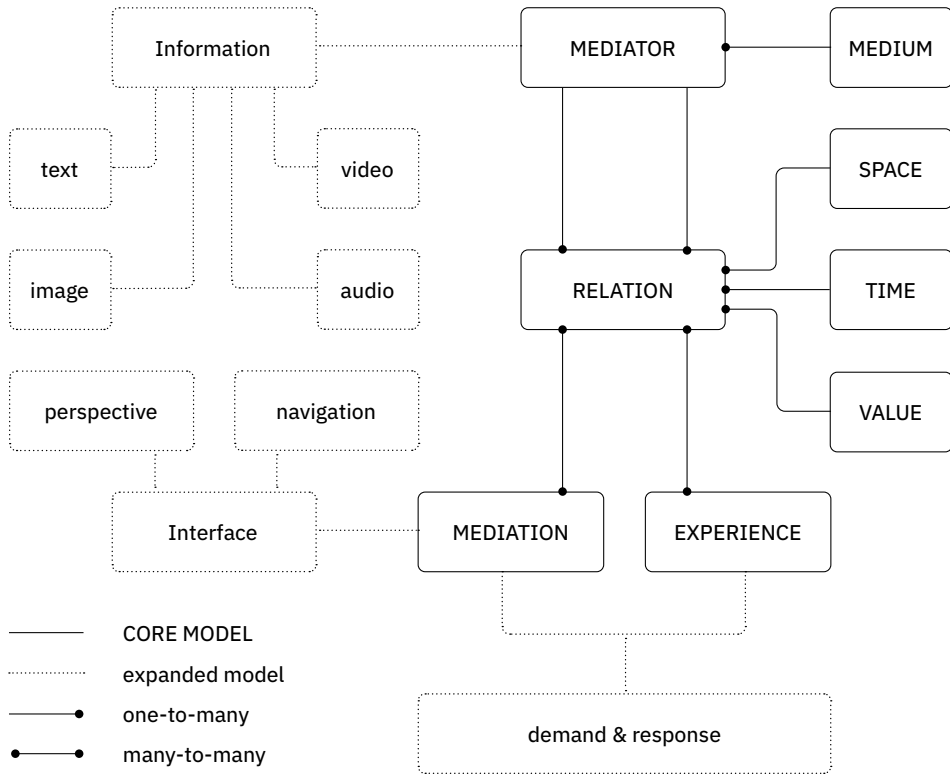


Fig. 6: The data model, developed by Simon Ganahl and Andreas Krimbacher, of the Topology module of the website campusmedius.net (version 2.0/2021).

An *experience*, in the sense of our data model, is an individual subset of relations including the attached mediators. And just as in our terminology a medium is a type of mediators, a *mediation* is a pattern of relations (e.g., the centralized topology occurring again and again in the “Turks Deliverance Celebration”). In other words, a regularity of spatial, temporal, and evaluative connections—but what is actually mediated in an experience? This question links to the box at the foot of the data model, which summarizes the major function of the Foucauldian *dispositif*, namely to strategically respond to a social demand.³⁷ While actor-network accounts focus on

37 In an interview from 1977, Foucault defined the *dispositif*, usually translated into English as “apparatus” or “mechanism,” as “a thoroughly heterogeneous →

concrete empirical cases in order to precisely describe who or what makes a difference to a course of action, *dispositif* analysis searches for types of connection, for historical patterns of relations that are actualized in the given situation. Let us take the aforementioned example of the protest against the live broadcast of the “Turks Deliverance Celebration”: the people who canceled their license wanted to speak up and refused to be influenced or educated from above—a collective demand to which Austrian radio was not ready to respond in 1933. However, counseled by the emigrant Paul Lazarsfeld, his wife Herta Herzog, and his friend Hans Zeisel, the Columbia Broadcasting System (CBS) and the New York advertising agency McCann-Erickson soon learned how to steer free expression of opinion in specific directions.³⁸

In short, the actor-network and the *dispositif* are the central theoretical concepts that are operationalized in the data model of *Campus Medius* 2.0. Thus far, I have only elaborated on the right-hand part of the **diagram**, the ontological structure of the database. Its left-hand side, however, shows how the stored data become perceptible to the users. In order to appear on the website, a mediator (or an event in the Topography module) needs to receive *information*—it literally has to be *informed* by texts, images, audio, or video. The **metadata** of these multimedia descriptions can be accessed via the quote icon next to each page title and downloaded as linked open

Fig. 6, p. 38

Fig. 29, p. 80 &
Fig. 30, p. 84

Fig. 9, p. 42

- ensemble [*un ensemble résolument hétérogène*]” and explicitly as “the network [*le réseau*] that can be established between these elements,” comprising “the said as much as the unsaid.” He emphasized, however, that he is not so much interested in categorizing the connected entities, for example as discursive or material, but rather in searching for the specific “nature of the connection [*la nature du lien*].” Foucault added that every *dispositif* “answers an urgent demand [*répondre à une urgence*]” by strategically solving a social problem. (Michel Foucault: “The Confession of the Flesh,” trans. Colin Gordon [French 1977], in: *Power/Knowledge. Selected Interviews and Other Writings 1972–1977*, ed. Colin Gordon, New York: Pantheon 1980, pp. 194–228, here pp. 194–195 [trans. modified].)
- 38 See Paul F. Lazarsfeld: “An Episode in the History of Social Research. A Memoir” [1968], in: Patricia L. Kendall (ed.): *The Varied Sociology of Paul F. Lazarsfeld*, New York: Columbia University Press 1982, pp. 11–69.

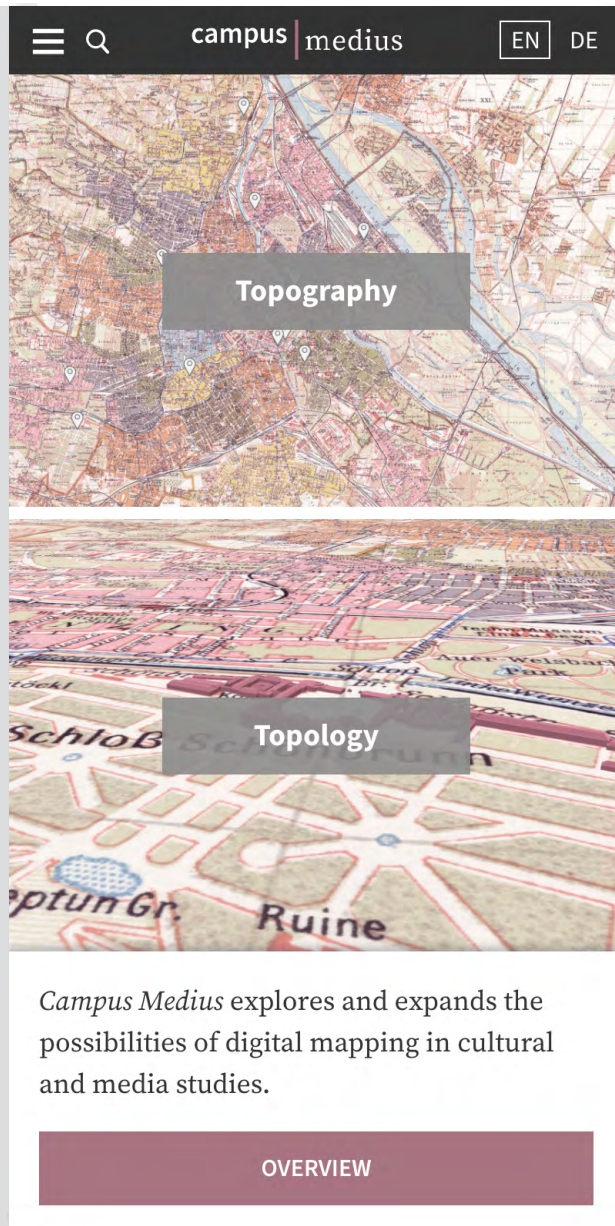


Fig. 7: Screenshot of the website campusmedius.net (mobile version 2.0/2021) showing the start page with the selection of the page “Overview” (text: Simon Ganahl, code: Andreas Krimbacher, design: Susanne Kiesenhofer).



Fig. 8: Screenshot of the website campusmedius.net (mobile version 2.0/2021) showing the start page of the Topology module (text: Simon Ganahl, code: Andreas Krimbacher, design: Susanne Kiesenhofer).

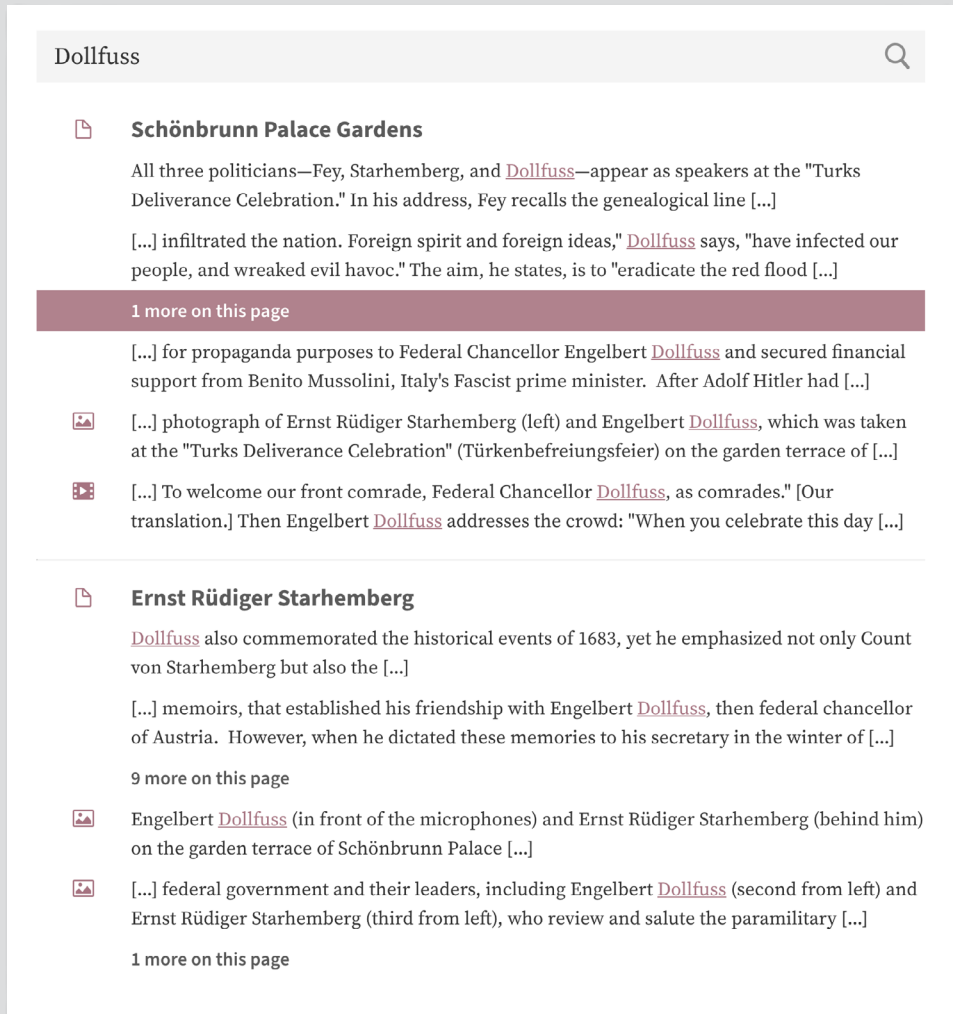


Fig. 10: Screenshot of the website campusmedius.net (desktop version 2.0/2021) showing the first results of a full-text search for the name "Dollfuss" (text: Simon Ganahl, code: Andreas Krimbacher, design: Susanne Kiesenhofer).

Fig. 10, p. 43

data.³⁹ The content is **full-text searchable** and available open access under the Creative Commons license CC BY 4.0,⁴⁰ apart from the works cited in *Campus Medius*, which are protected by copyright. The typefaces used on the website are open-source fonts, namely *Source Sans Pro* by Paul D. Hunt and *Source Serif Pro* by Frank Griesshammer.

Just like a mediator without information, a mediation—in the sense of our data model—stays invisible as long as there is no link to an *interface*, understood here as a mapping perspective (e.g., bird’s-eye) and a mode of navigation (e.g., zooming). Hence, these visualizations are not neutral or free of ideology, but themselves part of their respective *dispositif* of mediation. In common with the substructure of *campusmedius.net*, they were programmed with open-source software: the front end in Angular and Mapbox GL JS, the back end in Django using a PostgreSQL database. The project code is fully documented and freely available under the MIT license at GitHub.⁴¹ We have implemented the website bilingually and responsively, that is, in English and in German, as well as for both desktop and **mobile use**. It runs on a virtual server provided by the Vienna University Computer Center with all its data archived in the digital repository PHAIDRA.⁴²

Fig. 7, p. 40 &
Fig. 8, p. 41

4. Mapping Modern Media

In the last part of the introduction, I will sketch out the long-term plans that we are pursuing for *campusmedius.net*. We want to develop the website into a digital platform for mapping

- 39 The metadata include title, URL, abstract, keywords, authors, dates of publication and of last modification, and details on copyright and funding. They are modeled on the vocabulary of Schema.org and encoded in JSON-LD format (URL: [json-ld.org](https://www.json-ld.org/)).
- 40 This license permits unrestricted use and distribution of the respective material, provided that the creator(s), who retain(s) copyright, and the source are properly credited. See URL: creativecommons.org/licenses/by/4.0/deed.en.
- 41 See URL: github.com/campusmedius/campusmedius.
- 42 See URL: phaidra.univie.ac.at.