Video-on-Demand Research: New Methods, Old Questions

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Abstract

Internet video-on-demand (VoD) services such as Netflix, Prime Video, and iPlayer have been with us for almost two decades. A tremendous amount of research has been produced, addressing diverse topics including VoD catalogs, content, interfaces, curation, users, and governance-but there has been surprisingly little reflection on the methods used to study VoD services. In such a context, how might we speak of methodological innovation in VoD research? This article examines the existing landscape of VoD research and how it has changed over time. Emerging approaches such as AI-enabled content analysis and data donations are located in relation to established methods, and recurrent problems of knowledge are identified.

Keywords: Video-on-Demand, Streaming, Prominence, Television, Research Methods.

Internet video-on-demand (VoD) services such as Netflix, Prime Video, and iPlayer have been with us for almost two decades. During that time, a tremendous amount of research has been produced, addressing diverse topics including VoD catalogs, content, interfaces, curation, users, and governance. However, across this literature there has been surprisingly little reflection on the methods used to study VoDs.³ While scholars in adjacent fields such as social media studies have produced an extensive methodological literature including handbooks and toolkits, VoD research is relatively more "disorganized"-in the best sense of the word-which is to say that VoD research methods are less formally articulated and debated.

This tendency stems partly from the humanistic orientation of screen industry studies, which is often exploratory and critical in nature. Screen scholars are rightfully wary of methodological uniformity, for good reason, and prefer implicit rather than explicit norms. These are qualities our field should value and protect. However, this also means we lack a sense of VoD research as a coherent field with characteristic methods and analytical approaches. In particular, there is little support available to prospective scholars who seek practical information on how to design a VoD study: how to collect and analyze data, which conceptual frameworks to adopt, and so on.

In such a context, how might we speak of methodological innovation in VoD research? This question was the focus for a workshop the special section editors (van Es and Lobato) hosted at Utrecht University in September 2024. The purpose of the workshop was to collect, reflect on, and debate new methods in VoD research. We invited papers that proposed, modified, elaborated, demonstrated, or reflected on VoD methods, including empirical methods for data collection as well as critical and interpretive methods for data analysis. In other words, we wanted to explore what *can be* and *is* known about VoDs, as well as noting persistent gaps in knowledge.

It seemed like a good time to take stock of the VoD research field, as many interesting methods were already available and others were emerging. The preceding years had seen advances in catalog research, distant readings of VoD interfaces, reverse engineering of algorithms, logging user interactions through browser extensions, quantitative analysis of proprietary datasets from third parties, and integration of interface analysis with consumption data.⁵ The value of these approaches is that they allow us, in the absence of industry disclosure, to better understand trends in production, distribution, and consumption of content. But many of these pioneering studies were "one-offs," and there wasn't a clear sense among our colleagues of where to go next or how we might build on previous studies.

At the same time, the boundaries of the VoD category were being tested in new and interesting ways. Netflix and some other subscription video-on-demand (SVoD) services were experimenting with ad tiers, live streaming, staggered episode releases, Top 10 lists, and public disclosures of most-streamed titles. The introduction of ad tiers prompted some services to open their platforms to third-party audience measurement. All of this seemed to qualify some of the earlier, now dated, assumptions about VoDs as black boxes. Instead, we were seeing VoDs become something else-bundles of partial, often incompatible, and conflicting data that required particular skills to collect and analyze.

This special section of *Media Industries* comprises seven articles from our workshop participants that reflect on specific skills needed to make sense of VoDs. Each article proposes a unique method, or a set of methods, and explains how it can be productively put to work. The contributions offer valuable methods for "hacking," "scavenging," and "repurposing" data sources to better understand VoDs, and they showcase the effectiveness of these methodologies for studying VoD interfaces and content, production and supply chains, consumption and exposure, and questions of prominence. Methodologies discussed by our contributors include both qualitative approaches (production studies and ethnographic research) and quantitative approaches (scraping and data donations). Together, the articles illuminate the operations of VoD services and enhance our understanding of the wider online video

industry. These insights not only enrich theorizing but are also crucial for informing policy development related to local content production quotas for VoDs and prominence within VoD interfaces-issues firmly on the policy agenda in many nations.

In setting out a new agenda for TV studies, Catherine Johnson has recently proposed that scholars should "[r]e-theorise television as software and experiment with integrating new digital tools and methods into existing qualitative TV studies methods." Many articles in this special section show how digital tools have enabled researchers to access new data sources and conduct analyses on a larger scale, from a greater distance and at higher speeds. However, this does not mean that established qualitative methods have become irrelevant. On the contrary, in some cases, they have become even more valuable. Researchers have an expanded methodological toolbox and can adopt a mixed-methods approach, integrating quantitative and qualitative methods-combining distant and close readings-depending on the specific research question. In this sense, the articles collected in this issue frequently combine qualitative and quantitative methods, responding to Johnson's call to explore "the novel ways in which [digital data collection] can be integrated with existing textual and qualitative approaches."

Building on their own research experiences, Daphne Idiz and Nina Rasmussen offer strategies for navigating industry secrecy, access barriers, and platform power asymmetries in streaming production cultures. Their synthetic approach–combining interviews, industry event ethnography, and discourse analysis–prioritizes "interface ethnography" and "scavenging" over the sustained observation typical of traditional ethnographies.

To evaluate the prominence and discoverability of European works in VoD interfaces, Catalina Iodarche, Maria Trinidad García Leiva, and Tim Raats propose a 'close contact for context' approach. This approach, which adds a much-needed contextual layer to automated data collection from interfaces, involves "a close reading and thorough contextualization of case studies . . . to ensure accuracy, relevance, and comparability." Drawing on an exploratory study conducted of four US-based subscription VoDs in Spain and Belgium (namely, Netflix, Prime Video, Apple TV+, and Disney+), they provide a granular analysis of the movements of particular titles in and out of those services' interfaces. In this way, the authors suggest a range of methodological improvements to prominence and discoverability assessments, showing the value of a media industry studies approach.

Martin Bonnard reflects on the research methods needed to study small cinephile SVoDs, as opposed to the large global SVoDs. Borrowing from academic and nonacademic practices, he proposes a "cobbled-together" toolkit that combines qualitative methods, web-scraping, and small-scale data visualization. Bonnard reflects on the process of developing analytical strategies to study Fandor, Criterion, and LaCinetek, among other services, and seeks to inspire others wanting to do close readings of SVoD services to develop their own heterogeneous and adaptable methodologies.

Jannick Kirk Sørensen, an expert in quantitative interface analysis, reflects on the practicalities of researching public-service media VoD publishing. Using a web-scraping method, Sørensen assembles a massive longitudinal database comprising more than 3 million program (tile) appearances on VoD home screens to identify distinctive curation patterns in services

such as DRTV (Denmark), Tagesschau24 (Germany), and BBC iPlayer. Sørensen's contribution explains how to document and analyze public-service media (PSM) VoD interfaces at both a micro-level (day-to-day changes) and a macro-level (trends over several years), identifying seven indicators that reveal different aspects of VoD prominence. In this way, his contribution advances quantitative, scraping-based research on VoD interfaces.

Stéfany Boisvert and Dave Anctil propose AI-assisted content analysis as a method that enables media scholars to study large corpora of audiovisual productions available on VoD services. Unlike other methods that investigate interfaces or catalogs, their approach involves automated analyses of texts (original series and movies) to explore representations of gender and diversity. The authors show how multimodal large language models (LLMs), such as Google's Gemini, can be used for content analysis. Additionally, they discuss the epistemological and methodological challenges inherent in this endeavor, showing how AI tools may (mis)understand gender and identity. In this way, their article provides an important corrective to current enthusiasm for AI-enabled automation in the digital humanities.

Under the EU's General Data Protection Regulation (GDPR), citizens have the right to obtain their personal data from data processors, including VoDs such as Netflix and Prime Video. Through the "data donation" method, researchers invite participants to share such data for the purposes of academic research. In their article, Karin van Es, Dennis Nguyen, Laura Boeschoten, and Niek de Schipper analyze 126 Netflix data donations from subscribers in the Netherlands to critically examine commonly accepted claims about binge-watching, diversity, and popularity-claims that warrant closer scrutiny. Along the way, they explore the challenges and potential of data donations as a method for VoD research.

Judith Keilbach's article addresses a different aspect of VoDs: their environmental impact. Critically examining the discursive methods used by services such as Netflix to manage their public carbon disclosures, Keilbach provides an original analysis of the information practices—and the underlying power structures—in carbon emissions reporting. Her analysis raises important questions also about the new infrastructural, ecological, and data literacies that media scholars need to assess these issues. In this way, Keilbach highlights the need to broaden the scope of VoD analysis to include environmental externalities alongside more familiar topics like content, interfaces, and catalogs.

There are several recurring themes that run through these articles. The first is the relationship between VoD studies and other platform studies, including social media research. While video culture is now increasingly platformized, scholarship on VoDs has been largely divorced from other platform scholarship.⁸ Why is this the case? One explanation noted by several contributions to this special section is the specific characteristics of SVoDs. Unlike open platforms that rely on user-generated content, SVoDs distribute professionally produced entertainment content only. There is also the matter of business models: SVoDs use a mix of ads and subscription-based funding, whereas open platforms rely primarily on ads. All this differentiates VoDs from social media and helps explain why methods used in social media research–such as comments analysis and social network analysis–are not a feature of VoD research because the affordances of SVoDs do not allow such approaches.

Additionally, the strong focus in social media research on platform governance is less urgent in SVoD research because SVoDs are institutionally curated spaces lacking the same claim to public representation and openness. This said, we believe a closer conversation about methods between social media and VoD research is overdue and would be of mutual benefit to both fields, given their shared computational and data-driven nature. Indeed, regulatory trends in Europe (e.g., investment requirements for social media platforms in Flanders) foreground the blurred boundaries between social and VoD media and the need to think holistically about the video ecosystem.

A second recurring theme is access to data. The practical challenges of researching VoD services are well known: Data on catalogs, audiences, and usage are difficult to source and often commercially protected, raising concerns about transparency and access. The piecemeal data released by VODs tell only a partial story, often aligning with the industry's interests. Vet VoD scholars have been able to develop many innovative workarounds to these challenges that show what is possible from a research perspective. Witness Sørensen's large-scale scraping of VoD interfaces, and the manual catalog and interface analysis of Bonnard and Iordache, Garcia Leiva, and Raats as examples of methodological innovation responding to the black-box problem.

Related to this access issue is the question of industry collaboration in research projects. Engaging with industry insiders grants us access to their data, expertise, and discourses. Accordingly, there have been increasing calls for more empirical research and greater collaboration with VoD executives, designers, IT experts, policy-makers, and other industry professionals. Reflecting this imperative, the articles collected here are engaged with industry in many ways while maintaining the critical distance needed to make sense of those industries analytically. For Idiz and Rasmussen, expert interviews with screen professionals are an evergreen method, and close engagement with industry has allowed them a high degree of access that is often denied to academics. For Iordache, Garcia Leiva, and Raats, industry engagement means understanding the knowledge practices of regulators and knowing how to add value to regulatory debates. In their discussion of AI-enabled research methods, Boisvert and Anctil show that a very high degree of industry literacy-including a deep understanding of datasets and training protocols—is needed to understand AI outputs. Clearly, there is no one way to "do" industry engagement, and researchers must negotiate their own approach that is practical, ethical, and relevant for their own local contexts.

The need for industry engagement may also introduce new inequalities in data access and skills. For example, detailed VoD catalog data are now available for purchase from commercial providers at high cost (witness Ampere Analysis' SVoD Analytics platform, which is used by the European Audiovisual Observatory, Ofcom, and other government agencies). Other collection methods for catalog data require web-scraping tools, which demand technical skills less common in the social sciences and humanities. Moreover, the quality of both commercially obtained and scraped data is often uncertain or/and lacks transparency.

All this reminds us that data are not objective truths but are constructed interpretations of the world that carry significant implications for knowledge production.¹³ Additionally, this dynamic shapes the focus of computational studies, favoring certain platforms over others: Public service VoDs, for instance, are generally more transparent and accessible for scraping

purposes than SVoDs. Being reflective about these "streetlight effects" in study design is an important element of scholarly transparency.

Finally, this special issue highlights how various disciplinary perspectives are converging in VoD research. Contributions come from fields such as film studies, digital media studies, communication science, public-service media research, media economics, and computer science-each of which has developed its own valuable approaches. From a methods perspective, this plurality is generative. However, it also presents challenges because disciplines have different ways of conceptualizing scale, rigor, quality, and value. For example, small-*n* studies (e.g., micro-analysis of one VoD) are perfectly acceptable in qualitative disciplines but less so in quantitative disciplines, which may expect a wider comparative or longitudinal frame. For media industry studies, rigor is often defined in terms of contextual depth (e.g., carefully locating a VoD within its particular industrial ecology), whereas other, more quantitatively inclined disciplines may prioritize the size of the dataset and the sophistication of the analytical technique. These disciplinary differences are often irreconcilable, but they are also illuminating, in the sense they may help us articulate the value, specificity, and expectations of our own approaches. Facilitating interdisciplinary conversations and learning from the tacit knowledge of other disciplines is therefore essential for advancing VoD scholarship.

In conclusion, we hope this special section of *Media Industries* will be useful for scholars and other researchers seeking an overview of the latest ideas in VoD research. We also hope it is useful for those planning their own VoD research projects—whether by sparking ideas, providing templates, ventilating common frustrations, or provoking reflection on the implicit norms that structure our own methods.

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² Karin van Es is associate professor of Media and Culture Studies and project lead for the Humanities at Data School, both at Utrecht University. Her work is situated at the intersection of television studies, software studies and critical data and algorithm studies. Karin is author of the book The Future of Live (Polity Press, 2016). Her research has been published in outlets such as Television & New Media, Media, Culture and Society, Critical Studies in Television and Social Media + Society. Recently, she co-edited the volumes Governing the Digital Society (AUP, 2025) and Collaborative Research in a Datafied Society (AUP, 2024).

³ For an overview of existing methodological literature on VODs, see Ramon Lobato, "Rethinking international TV flows research in the age of Netflix," *Television & New Media* 19, no. 3 (2018): 241–56; Alexa Scarlata Lobato and Tyson Wils, "Video-on-Demand Catalog and Interface Analysis: The State of Research Methods," *Convergence* 30, no. 4 (2024): 1331–47; Jordi McKenzie, Paul Crosby, and Sunny Y. Shin, "Netflix Chills and Revamps Its Viewing Metrics: Preliminary Analysis and Opportunities for Research," *Poetics* 96 (2023): 1–14.

- ⁴ The workshop, Innovative Methods for VOD Research, was held at Utrecht University on 12 September 2024.
- Examples of these approaches include, respectively, Christian Grece, Films in VOD Catalogues Origin, Circulation and Age (European Audiovisual Observatory, 2018); John P. Kelly, "Recommended for You: A Distant Reading of BBC iPlayer," Critical Studies in Television 16, no.3 (2021): 264–85; Niko Pajkovic, "Algorithms and Taste-making: Exposing the Netflix Recommender System's Operational Logics," Convergence 28, no. 1 (2022): 214–35; Deborah Castro et al, "The Binge-watcher's Journey: Investigating Motivations, Contexts, and Affective States Surrounding Netflix Viewing," Convergence 27, no. 1 (2021): 3–20; Amanda D. Lotz, Oliver Eklund, and Stuart Suroka, "Netflix, Library Analysis, and Globalization: Rethinking Mass Media Flows," Journal of Communication 72, no. 4 (2022): 511–21; Neil Thurman et al., "Predicting Streaming Audiences for a Channel's On-Demand TV Shows: Discerning the Influences of Choice Architecture, Consumer Agency, and Content Attributes," Convergence 30, no. 3 (2023): 1254–70.
- ⁶ Catherine Johnson, "Provocation: An Agenda for the Future of TV Studies: Technology, Audiences, Stakeholders," *Critical Studies in Television*, 12, https://doi.org/10.1177/17496020241308763.
- ⁷ Johnson, "Provocation," 7.
- ⁸ Daphne Rena Idiz and Thomas Poell, "Dependence in the Online Screen Industry," *Media*, *Culture & Society* 47, no. 2 (2025): 375–93.
- ⁹ Michael Wayne, "Netflix Audience Data, Streaming Industry Discourse, and the Emerging Realities of 'Popular' Television," *Media, Culture & Society* 44 (2): 193–20.
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- ¹² van Es, "Exploring Netflix Myths"; Johnson, "Provocation."
- ¹³ Johanna Drucker, "Humanities Approaches to Graphical Display," *Digital Humanities Quarterly* 5, no. 1 (2011), http://digitalhumanities.org:8081/dhq/vol/5/1/000091/000091.html

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