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Platform

A Tapestry of Meanings and Metaphors

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Abstract

This chapter explores the metaphorical 'tapestry' of meanings woven into the 'platform' metaphor, tracing its journey from a technical term in the computing sphere to a central concept in digital media. Initially coined to describe digital entities, 'platforms' have evolved into complex entities layered with diverse meanings conveyed through metaphors like 'walled gardens,' 'tentacles,' 'gatekeepers,' and 'ecosystems.' This evolution highlights the ongoing challenge of defining 'platforms' as complex technological, social, political, and economic entities. The chapter navigates through the term's evolution, recognizing its roles as both an actor term and a conceptual entity across various disciplines, while also serving as a subject (target) of governance and regulation. Emphasizing the richness and nuanced politics inherent in the metaphor, the chapter discussed its significant influence on academic, industry, and regulatory discussions. Furthermore, it explores the emergence of "platformization," which advanced 'platforms' into the realm of public concern. Lastly, the chapter underscores that platforms are not solely abstract concepts but tangible entities shaped by distinct material conditions and politics. To ensure the enduring relevance of the platform concept in digital media and platform studies, the chapter advocates for the continuous integration of the platform metaphor with related concepts such as 'ecosystems.' This ongoing process of 'weaving' and expanding the 'tapestry' of meanings and metaphors surrounding the platform concept aims to enrich its explanatory capacity regarding its diverse societal impacts.

Introduction

Since the late 1990s, the term "platform" has been the subject of diverse interpretations through a myriad of meanings and metaphors, including 'walled gardens,' 'town squares,' 'ecosystems,' and 'clouds.' Additionally, 'platforms' have been compared to 'operating systems,' 'gatekeepers,' and 'black boxes.' Some suggest they have 'tentacles' akin to squids, or draw comparisons to 'lego' and 'pizza.' These examples highlight the challenges in characterizing and defining 'platforms' in a dynamic digital media environment, where its usage spans metaphorical, conceptual, empirical, practical, and governance dimensions. This chapter discusses this metaphorical 'tapestry' of meanings, akin to a layered textile fabric, and explores the nuanced politics surrounding the 'platform' metaphor, tracing its evolution and diverse interpretations.

For the purpose of this chapter, a 'platform' is first and foremost a *metaphor* representing the complex digital entities that facilitate modern digitally-mediated interactions, developments, and content dissemination.[1] Its various uses encapsulate the multifaceted nature of 'platforms' as technological, political, social, and economic entities, which fundamentally shape our interaction with digital media and social processes.

Discursively, the term "platform" carries various connotations shaped by its initial usage by 'platform' providers like Amazon, Google, and Facebook. Drawing on insights from leading scholars (Gillespie, 2010; 2017; Steinberg, 2019; Van Dijck, 2017), this chapter expands upon existing reflections on the politics of 'platforms.' Cristofari's collection of interviews with European digital media scholars (2023) further explores the role of metaphors employed in academic discourse to conceptualize platforms, including 'marketplace,' 'stack,' 'lego,' and 'octopus' and 'squid.' These connotations encompass technical 'platforms' for development and data sharing (referenced in metaphors like 'stack,' 'lego,' etc.); platforms for activities such as speaking, sharing, and working ('town squares,' 'conduits', 'gatekeeper', 'barometer,' etc.); and platforms for opportunities in business and innovation ('marketplace,' 'platform economy,' 'creator economy,' 'foundation', etc.). Furthermore, critical research highlights the underlying mechanisms of resource extraction, exploitation, and dominance, symbolized by metaphors like 'walled gardens', 'silos,' 'tentacles,' and 'eating.'

This chapter explores the evolution of the term "platform" from its origins as an industry-driven *actor term* to its conceptualization as an *object of study* across multiple disciplines. It also analyzes how the term has evolved into both an active *agent* and a *subject* (target) of governance and regulation. Initially popularized in the mid-2000s with the rise of social media and tech giants, the chapter examines how the term was adopted by industry stakeholders and researchers. It then discusses the emergence of "platformization" discourse, marking a transition into what Burgess (2021) refers to as the current "platform paradigm." Furthermore, the chapter examines platforms not only as abstract (conceptual) entities but also as tangible technical systems intertwined with larger structures. It frames questions of governance and power for empirical investigation.

[1] We use single quotes when emphasizing or referring to the metaphorical nature of terms and double quotes in all other cases.

In summary, the chapter serves as an introduction to platform studies, tracing the evolution of the term "platform" and its multiple meanings. Throughout the chapter, we assess the enduring significance of the 'platform' as a nuanced conceptual and empirical framework in digital media and beyond.

'Platform' as an Actor Term and a Cross-Disciplinary Conceptual Entity

'Platform' as an Industry-Driven Term

In the late 1990s, 'platforms' emerged in the computing industry as a term for "technical base" or "computational infrastructure," gaining prominence alongside the rise of Web-based services and user-generated content (Gillespie, 2010). This architectural meaning conceptualizes the computer's hardware and software layers as infrastructure for building applications ("apps"). The term "Web 2.0," coined by Tim O'Reilly in response to the post-2000 dot-com bubble burst, signaled the Internet's role as a "new" development platform for creating and hosting services. O'Reilly aimed to revitalize the Internet's economic potential by highlighting a "new" phase of the Web as a platform for development (Helmond, 2015). In 2007, Mark Zuckerberg presented Facebook's "platform" strategy, transforming the social network into an 'operating system,' enabling third parties to "develop Internet services on Facebook's infrastructure," akin to Microsoft Windows (Kirkpatrick, 2007). While "Web 2.0" was a popular buzzword, it eventually was overshadowed by the platform metaphor, becoming the dominant descriptor for the contemporary Internet landscape.

Simultaneously, the term "platform" gained traction in the gaming industry and game studies (2009). Montfort and Bogost's pioneering work in "platform studies" investigated the underlying computer systems supporting creative work, focusing on video game platforms with tightly connected software and hardware layers. While other early platform studies understated this hardware-software connection, recent research has focused on mobile devices, app stores, 'virtual reality' (VR) platforms, the "metaverse," and 'cloud' platforms (Gerlitz et al., 2019b; Egliston & Carter, 2022; Van der Vlist et al., 2024b).

The current narrative, primarily focused on the platform as an industry and academic term in the United States, highlights what Jin (2015) describes as "platform imperialism." This concept underscores the dominance of U.S.-based digital platforms like Facebook and Google globally, exemplifying the rise of this form of imperialism. Steinberg (2019) convincingly demonstrated that the term "platform" already became prominent in Japan's media industry and business literature in the mid-1990s, particularly through the development of Japan's mobile Internet and NTT DoCoMo's i-mode system. He traces the "metaphoric economy and circulation" of the term across historical, geographical, cultural, institutional, and corporate contexts, showing its transition from a theoretical concept to a practical application in Japan's technology market and media industry (p. 2). The i-mode system served as a technological intermediary, connecting content and platform layers, transforming early mobile phones into multi-functional multimedia devices (p. 128). Such accounts

highlight the global lineage of the platform concept. Exploring other cultural contexts reveals diverse adaptations, especially in the form of so-called "super apps." These apps aim to offer a wide range of services and position themselves as all-in-one platforms, with the Indonesian app Gojek even describing itself as "a platform nations run on" (Van der Vlist et al., 2024a, p. 21).

Cross-Disciplinary Perspectives on 'Platforms'

Since the early 2010s, the 'platform' concept has gained prominence in interdisciplinary research, spanning diverse academic fields. Its relevance extends to digital media, social media, and the field of "platform studies," covering major entities like Facebook, Twitter, Google, Bing, Spotify, YouTube, Uber, and Grab. This research area spans humanities, social sciences, business and management, computing and engineering, and the applied domain. In short, the platform has evolved into a 'traveling' concept, adapting across various contexts.

Based on prior research by the authors (Van der Vlist, 2022, pp. 32–52), three distinct perspectives on the cross-disciplinary conceptualization of platforms can be distinguished.

Firstly, from a technical or engineering standpoint, the term "platform" refers to the extensible codebase of a software-based system providing core functionality shared by modules and the interfaces through which they interact (De Reuver et al., 2018, p. 126). A service or website can evolve into a 'platform' by offering APIs (Application Programming Interfaces) enabling developers to build applications on top of it, making it extendable and programmable (Helmond, 2015). Among diverse platforms, Facebook has emerged as a prominent example (Van der Vlist et al., 2022). This perspective focuses on APIs facilitating information exchange, interoperability, extensibility, and data integration within platforms. This architectural conceptualization is associated with metaphors such as a 'stack,' underscoring the complex, multi-layered nature of platforms, or 'lego,' accentuating their modularity and programmability (Cristofari, 2023), or 'pizza,' emphasizing their role as 'infrastructural' service providers (while also implying a level playing field) (Van Dijck, 2017).

Furthermore, critical technical perspectives highlight that platforms are composite structures, not monolithic entities, composed of loosely-connected modular components. These components interconnect to form dynamic "service assemblages," emphasizing the complexity and adaptability inherent in contemporary platform 'architectures' (Blanke & Pybus, 2020; Van der Vlist et al., 2022).

Secondly, from a business and management standpoint, "platforms" are conceived as "multi-sided" 'marketplaces,' emphasizing their role as market intermediaries between distinct groups, such as end-consumers and advertisers or buyers and sellers of products and services. Platforms function as "matchmakers" across multiple groups or markets and extend beyond digital realms (Evans & Schmalensee, 2016). Popular examples include Airbnb and Uber. This viewpoint emphasizes the creation of value, competitive dynamics, and the rise of platform-based business models. Researchers in this domain often explore the "platform economy," encompassing new companies globally engaged in the 'platform' business model, and delve into how they can leverage the "platform revolution" (Parker et al., 2016).

Thirdly, from a critical media and culture studies standpoint, it is important to recognize that "platforms" are not merely neutral technical or economic intermediaries but also socio-economic structures that influence rules, norms, and policies (Van Dijck et al., 2018). They exert a profound impact on user behavior and the broader digital media ecosystem (Van der Vlist, 2022). As Burgess contends, platforms are powerful cultural shapers, significantly influencing the forms of creativity and social interaction that occur within them (2021, p. 24). This perspective underscores the politics of platforms as non-neutral mediators and powerful influencers of culture and society.

In this cross-disciplinary research, some fundamental characteristics of 'platforms' emerge, which has been conceptualized and studied as "*platformness*" (Helmond & Van der Vlist, 2019, p. 7; Van der Vlist, 2022, pp. 46–52). A first key aspect of "platformness" is the diverse user groups served by platforms (referred to as "multisidedness"), which extends beyond end-consumers to include developers, businesses, creators, investors, and other user groups. This aspect, primarily associated with the business and management perspective, as well as critical perspectives in media and culture studies, underscores the broad reach and impact of platforms on different user or stakeholder groups and industry. Another notable characteristic is the capacity for "programmability" and the operation of platforms across multiple levels of infrastructure, termed "multilayeredness" (Helmond & Van der Vlist, 2019, p. 7). This encompasses aspects such as 'interface,' 'architecture,' and 'ecosystem,' and is primarily associated with the technical or engineering perspective, as well as critical perspectives, emphasizing the interrelated technological and structural layers of platforms.

'Platforms' as Matters of Public Concern

In the nearly two decades since the popularization of the platform metaphor in the mid-2000s, various academic fields, disciplines, cultural practices, and industry sectors now operate within a "platform paradigm" (Burgess , 2021, p. 22). The term "platformization" refers to the expansion of the 'platform'—both as a technical architecture and a business model—beyond the Web, marking a profound societal transformation (Helmond, 2015). Critical platform studies scholarship has evolved with the emergence of the current platform paradigm, critiquing a shift from the more egalitarian "Web 2.0" to an environment marked by concentrated power and control (Burgess, 2021). While "Web 2.0" emphasized user participation, the platform metaphor highlights corporate influence in shaping participatory practices and creator cultures, impacting livelihoods, privacy, and freedom of speech.

The following section discusses this evolution, with a specific focus on the 'platform' as a matter of ongoing public concern or a "contested concept" (Van Dijck et al., 2018), especially within the context of "platformization."

"Platformization" and Digital Transformations

As a verb, "*platform-ization*" broadly encompasses the transformation of entities *into* 'platforms' or the alignment of entities' processes *with* 'platforms,' reflecting their influence in reshaping social and economic processes. Closely linked to the rise of "platformization"

discourse is the influential notion of software and platforms "eating the world." Initially, American businessman and software engineer Marc Andreessen asserted that "software is eating the world" (2011), followed by other key industry figures contending that "platforms" are now eating the world (Satell, 2016). These expressions, again rooted in metaphorical language, capture a distinct aspect of 'platforms' as both specific entities and business models, suggesting their enormous impact on companies and organizations across diverse sectors and spheres of life. Metaphorically, these phrases draw from social or economic Darwinism (i.e. "eat or be eaten"), implying a world where only the most adaptable entities or business models thrive through an evolutionary process of natural selection. Furthermore, surviving entities become increasingly influential in this process.

In scholarly discourse, this ongoing process has initially been described with terms such as "Googlization," denoting Google's expansion into diverse markets, applications, and even traditional institutions like libraries (Vaidhyanathan, 2012). Similarly, subsequent terms like "softwarization" (Manovich, 2013) and "platformization" (Helmond, 2015) encapsulate the ongoing spread of 'platforms' as both specific entities (e.g. Google or Facebook) and business models across various markets, sectors, and spheres of life, accompanied by societal consequences and associated risks and harms. As such, critical scholars of "platformization" and its politics have published about sectors like public healthcare and education (Van Dijck et al., 2018), urban spaces and places (Barns, 2020), automobility (Hind et al., 2022), cultural industries (Poell et al., 2021), the global (data-driven) digital marketing and advertising industry (Helmond et al., 2019; Van der Vlist & Helmond, 2021), and beyond.

Transforming the platform metaphor into a verb, the term "platformization" accentuates two key dimensions. First, it underscores a dynamic and evolutionary process instigated by the platform itself, unfolding gradually over time. This viewpoint captures the continuous development and expansion of platform capabilities and roles. Second, it generalizes the transformative capacities inherent in these 'platforms,' implicitly emphasizing their significance as distinct entities and models. This emphasis on major entities like Google, Meta, or Apple, however, may inadvertently overshadow the central roles played by various other participants in the platform's 'ecosystem' (explored in the last section of this chapter), such as third-party app developers and business partners (Gerlitz et al., 2019b; Helmond et al., 2019; Van der Vlist & Helmond, 2021), especially in the early stages of the evolutionary trajectory. Essentially, 'platforms' proliferate and grow in diverse ways, often requiring empirical research to comprehend the specific mechanisms and material footprints of platformization as it manifests in reality. This has prompted calls for investigating "actually existing platformization" (Van Doorn et al., 2021).

In each instance, it is important to scrutinize "*how exactly* these […] platforms have 'eaten the world'" (Van der Vlist, 2022, p. 247). This entails investigating the precise mechanisms at work, identifying the actors involved, understanding the influences and governance frameworks at play, and exploring the factors guiding their decisions to engage or oppose. For example, it is vital to examine the actions of individual developers, development firms, enterprise software engineers, businesses, and other stakeholders (2022, pp. 247–253).

Related terms such as "de-platforming" and "de-platformization" represent efforts to *reverse* or counteract the process of platformization in specific contexts. Rather than facilitating expansion and integration, these terms indicate interventions aimed at curbing or

diminishing the broad influence and presence of platforms, serving as an implicit governance strategy (Van Dijck et al., 2021, p. 3439). Additionally, scholars have explored the intersection of 'platforms' and 'infrastructure,' introducing another layer of metaphorical language that encompasses notions of broad public value, ubiquity, reliability, invisibility, gateways, and breakdown (Plantin et al., 2018). This has given rise to related work on the "infrastructuralization" of platforms and the conceptualization of the "platform-as-infrastructure" (Helmond et al., 2019). While each of these metaphors sheds light on different aspects of the entities known as 'platforms,' none fully captures all their significant properties. Therefore, the ongoing use and engagement with these metaphors underscores the evolution of 'platforms' and their associated politics and societal impacts.

'Platforms' as Agents and Subjects of Governance and Regulation

Platformization discourse, extending into societal impact, political economy, and diverse perspectives on "platform governance" and "platform power," prompts global policymakers and regulatory bodies to address the extensive influence of major providers like Google (Alphabet), Apple, Facebook (Meta), and others. Providers of social media strategically benefited from the term "platform" as it allowed them to distinguish their operations from those of traditional media companies, which, in the U.S.,[2] are legally responsible for the content they distribute. As such, they could "avoid liability for the information activities of their users, to the extent that they serve as a *conduit* rather than as producers of content themselves" (Gillespie, 2010, p. 357, emphasis added). Recognizing these broader concerns, the term "platform" now transcends being an actor or researcher term, becoming a focal point in democratic deliberation, public governance, and regulatory activities. Entities such as the Federal Trade Commission (FTC) in the U.S. and the European Commission (EC) actively regulate digital platforms, reflecting a broader understanding of the substantial influence exerted by "Big Tech," impacting political and societal spheres globally, especially post the "techlash" in the late 2010s.

In this context, the platform plays a dual role—both as an active *agent* and the *subject* (target) of governance and regulation, aligning with scholars' distinction between the governance *of* and *by* 'platforms' (Gillespie, 2018). As "private governors," platforms significantly influence digital and democratic participation, yet their accountability to users is limited (Klonick, 2018). Conversely, as *subjects* (targets) of governance, "platforms" face obligations to comply, which they may attempt to navigate.

For example, the EU Digital Services Act (DSA) identifies "Very Large Online Platforms" ("VLOPs") and imposes regulations to address risks, including illegal content and their impact on fundamental rights, public security, and general well-being (EC, 2023a). In other words, this is not so much an interpretation of what is (and is not) a 'platform' as an actual list of specific target names compiled by regulatory bodies for particular political purposes (EC, 2023b). Similarly, the Digital Markets Act (DMA) maintains a public directory of "Gatekeeper" designations (EC, 2023c), a metaphor that highlights platforms'

[2] Section 230 of the Communications Act, which was enacted as part of the Communications Decency Act of 1996, offers restricted federal protection to both interactive computer service providers and users.

controlling position in digital markets and underscores power dynamics whilst carrying political implications. For example, Amazon disputes its categorization as a "very large online platform" under EU law, claiming unfair treatment (Brodkin, 2023).

By contrast, regulating the consequences of platformization *dynamics* rather than calling out individual platforms may involve targeting specific 'bottlenecks' or service provider types like digital authentication or payment services (Van Dijck, 2021). Additionally, recognizing policy 'silos' and trade-offs arising from platformization's scope is crucial (Popiel, 2022).

Furthermore, the politics surrounding legal metaphors also deserve scrutiny. The metaphor of private 'governors' likens platforms to government entities, emphasizing their quasi-governmental role. Platforms using constitutional metaphors, like Facebook's "Oversight Board" as a "Supreme Court," legitimize their governance structures and solidify private power in mediating free speech (Cowls et al., 2022).

'Platforms' as Tangible Technical Systems

The platform, however, embodies not only a conceptual notion but also a physical reality, manifesting as complex technical systems comprising evolving layers of hardware and software. These tangible entities, characterized by their programmability and constant evolution, interact with diverse user groups through digital interfaces. Platform providers enact this tangibility by offering publicly-accessible resources, platform documentation, that document their rules and operations for different purposes and audiences (Helmond & Van der Vlist, 2019; Van der Vlist, 2022).

As tangible entities, platforms provide users, developers, businesses, and partners with distinct action possibilities and "affordances" through (tangible) graphical user and application interfaces, such as buttons and text fields, shaping action possibilities and meaning-making practices (Bucher & Helmond, 2017). Recognizing this tangibility further involves investigating the constituent elements and "material conditions" of platforms (e.g. Blanke & Pybus, 2020), irrespective of the metaphors used to characterize their tangibility.

The Material Conditions and Politics of 'Platforms'

Analyzing the unique materiality of platforms facilitates critical empirical research into their often concealed or intentionally obscured properties and relationships. This investigation is crucial for understanding the material politics and political economy of platforms, catering to their diverse user groups. It goes beyond the discursive aspects of platforms (Gillespie, 2010) to explore their tangible properties and politics.

Platforms offer tangible "boundary resources" like APIs, SDKs, and platform documentation, shaping how third parties, such as users and developers, may engage with the platform (Helmond & Van der Vlist, 2019). These resources not only facilitate user and developer interaction with the platform but also embody its governance strategy, dictating how control and collaboration are balanced within the platform's environment (Van der Vlist et al., 2022). The material presence of these resources is key in shaping the strategic openness

(or restrictiveness) of a platform, influencing the extent of interactions and developer contributions under set conditions. They also play a key role in the governance of platforms, impacting the "observability" of these platforms, their algorithms, and their societal impacts (Rieder & Hofmann, 2020). This concept resonates with the metaphor of platforms as 'black boxes,' complex and opaque systems that defy easy comprehension. Despite challenges in transparency, acknowledging the materiality of platforms underscores the importance of using existing platform resources and platform documentation for their critical and historical analysis (Helmond & Van der Vlist, 2019).

Platforms' as tangible entities have strategically governed boundaries (e.g. Helmond et al., 2019), often "porous" or "permeable," enabling platform expansion or platformization (Helmond, 2015). Popular news outlets like the *BBC*, *CNN*, and *The New York Times* have employed metaphors like 'tentacles' to illustrate this expansion, with headlines like "As 'Like' Buttons Spread, So Do Facebook's Tentacles." Such metaphors, including likening platforms to 'octopuses,' 'squids,' or even 'vampire squids,' emphasize how these platforms entrench themselves into systems and economic sectors beyond their original domains, thereby extending their reach and influence (e.g. Cristofari, 2023; Helmond, 2015; Winseck, 2020). While *The Economist* (2017) depicted the Big Tech giants as tangible 'oil rigs,' drilling for data, this metaphor overlooks the nuanced mechanisms platforms use, through their extendible architectures, to seep into and encapsulate new domains, sectors, and industries.

Critical data and privacy researchers have noted how platforms such as Facebook effectively use features like widgets and "like" buttons as their 'tentacles,' to reach into external websites and apps (e.g. Gerlitz & Helmond, 2013; Helmond, 2015). This metaphor accentuates platforms' insatiable data appetite for data, aiming to expand into as many other websites and apps as possible, pulling external (structured) data into their proprietary platforms. It illustrates the relationship between embeddedness, decentralization of data capture, and recentralization of data ownership, especially by major platforms like Google and Facebook, who use this data for their products and services and market dominance. However, it is important to emphasize that "porous" or "permeable" boundaries do not suggest unintentional external breaches like data leaks or hacks. Rather, this permeability is a result of strategic design and controlled boundary resources and other interfaces, as we have shown elsewhere (Van der Vlist et al., 2022).

Popular metaphors of 'walled gardens,' data 'silos,' or content 'fortresses' embody the idea of "digital enclosure" (Andrejevic, 2007) symbolizing enclosure or capture within a platform. A 'walled garden' keeps users within the platform's own 'ecosystem,' which is its "sphere of influence" (Van der Vlist, 2022, p. 23), often motivated by commercial interests, such as consolidating advertising revenue exclusively within the platform. This strategy fundamentally revolves around maintaining and sometimes exerting control. While the notion of a 'walled garden' reflects a platform's enclosed spaces for maximizing profit, the related metaphor of the platform as 'gatekeeper' symbolizes its control over market access (cf. Cristofari, 2023).

Ecological Perspectives on 'Platforms'

Natural metaphors like 'tree,' 'ecosystem,' and 'species' offer nuanced analytical lenses to conceptualize platforms as tangible technical systems that interact continuously with diverse actors and environments. These metaphors provide insights into platforms' structure, dynamics, and relationships within their broader environments (Van der Vlist, 2022). In particular they enhance our understanding of digital platforms in terms of their interconnectedness and interdependence, dynamics, evolution and adaptation, diversity and niche occupation, health and resilience, and competition and symbiosis (cf. Mars et al., 2012).

The 'tree' metaphor has, for instance, been employed to visualize platformization and its governance across multiple levels and industry sectors (Van Dijck, 2021). It depicts 'platform' ecosystems as hierarchical and interdependent structures, akin to a tree with 'roots,' 'trunk,' and 'branches.' This analogy helps understand the layered nature of digital infrastructures, intermediary platform providers, and the wide range of sectoral applications and services dependent on these infrastructures and intermediary services (2806–2807).

Embedded in interdisciplinary platform studies, the 'ecosystem' metaphor provides a robust theoretical framework for understanding digital configurations, environments, and the dynamic interactions of platforms. It portrays platforms as tangible, programmable systems with "complements" (such as apps and services) built 'upon' them, and "complementors" (users and stakeholders) interacting with these complements, forming the larger interacting environment of platforms (De Reuver et al., 2018, p. 127).

This widely used 'ecosystem' metaphor not only draws on the concept of natural order but also mirrors the interconnectedness and power struggles found in natural ecosystems. Platforms, akin to living organisms in biological ecosystems, are interconnected and interdependent with various components, including diverse organizations and stakeholders. These components are bound by varying agendas, dependencies, and interdependencies, leading platforms to evolve and adapt in response to internal and external pressures, user needs, technological advancements, and competitive forces, reflecting the dynamic, living nature of ecosystems (e.g. Mars et al., 2012; Tiwana et al., 2010; Van der Vlist et al., 2022). Balancing the ecosystem is crucial for a platform's long-term sustainability, fostering healthy competition and cooperation, yet this balance is a complex, contested process influenced by conflicting interests such as user privacy versus advertising, and the dichotomy between innovation and standardization versus openness and control. Platforms aim to 'orchestrate' their 'ecosystem' to navigate this balance advantageously while operating in a competitive environment.

In short, the (digital) 'ecosystem' metaphor, initially linked to nature and biology, has 'traveled' and evolved into a socio-technical metaphor for digital capitalism, emphasizing features like expansion, competition, and (self-)regulation, with an emphasis on adaptability. However, Krivý (2023, p. 2) also raises the important point that this metaphorical application can sometimes obscure power dynamics by drawing analogies with dynamic, self-generating, and complex nature, as opposed to those highlighting the immutability of the natural order.

In the digital ecosystem, various actors function akin to 'species' in a natural ecosystem, significantly influencing its health and dynamics, with some holding a disproportionate

influence on the ecosystem's structure (cf. Mars et al., 2012). This analogy is explored in digital media, shedding light on the complex interactions and diverse power dynamics among these varied 'species.' Just as various plants, animals, and microorganisms are essential for maintaining the balance and functionality of a natural ecosystem, different 'species' within a platform ecosystem play a central role in its overall stability and functionality. Scholars have extensively mapped these ecosystems, categorizing types of actors as ('invasive') species and examining how they interact within the digital media environment (e.g. Blanke & Pybus, 2020; Gerlitz et al., 2019a; Lai & Flensburg, 2021; Van Dijck et al., 2018).

Despite its initial connotations, the ecosystem metaphor continues to be productive in understanding human-made structures and networks like platforms (Mars et al., 2012). It reveals key players exerting significant influence, showcases interactions among actors (and 'species') connected by resources and information, and emphasizes the non-static, evolving nature of 'platforms' and their broader 'ecosystems.' The metaphor aids in comprehending the structured yet fluid characteristics of 'platforms,' emphasizing their participation and integration into broader systems and structures. As boldly stated, "There is no platform, just ecosystems" (Van der Vlist, 2022, p. 23), advocating for a shift in focus from individual platforms to the ecosystem as the primary unit of study. In other words, researchers in the field should regard the 'ecosystem' as the central analytical and critical lens for understanding governance relationships, power dynamics, and the broader societal impacts of platforms.

Weaving the Platform's 'Tapestry' of Meanings and Metaphors

Since its emergence in the 1990s, the 'platform' metaphor has undergone a significant evolution, shaping a diverse array of meanings and metaphors within the digital media landscape. While Tim Berners-Lee initially envisioned the early web as a collaborative effort to "weave the web" into "the very fabric of web life" (Berners-Lee & Fischetti, 1999, p. 97), today's Big Tech platforms have deeply integrated themselves into the fabric of everyday life. The multitude of interpretations surrounding 'platforms' demonstrates the complexity of these entities. This chapter has served a dual purpose: to introduce the field of platform studies through its 'tapestry' of meanings and metaphors, and to trace the use of the term platform and its evolution as an object of study, thereby contributing to a deeper understanding of the politics surrounding platforms.

The evolution of the 'platform' metaphor has been profound, transitioning from its origins as an industry-driven term to becoming a central concept in digital media, encompassing technological, political, social, and economic dimensions. The mid-2000s marked a key point, with the rise of social media and tech giants shaping the narrative around 'platforms.' The exploration continued through their conceptualization as objects of study and active agents influencing societal processes. The emergence of "platformization" discourse pushes platforms into the realm of public concern, recognizing their impact on diverse sectors, culminating in what is now termed the "platform paradigm."

Ultimately, this chapter, through the concept of the 'tapestry', demonstrates that the meaning of the 'platform' metaphor is far from static; it is a dynamic and evolving concept with multiple meanings that transcends disciplines, cultures, and societal domains. It travels across various applications and stands not only as a discursive entity but also as a tangible and influential agent, continually shaping our interconnected digital world.

Amidst the variety of spatial, natural, evolutionary, and various metaphors characterizing the entities termed as platforms, it is important to adopt a critical perspective regarding the influence of these metaphors on both academic and public perceptions. Cristofari (2023) emphasizes the value of metaphors in platform theory for their capacity to capture the dynamic essence of platforms and the process of platformization. Metaphors serve as invaluable tools for understanding the fundamental aspects and dynamics of 'platforms,' and provide a means to discuss evolving digital phenomena before formal definitions and categories are established.

In conclusion, to ensure the enduring relevance of the platform concept in digital media and beyond, we advocate for the continued integration of the platform metaphor with conceptual frameworks like 'ecosystems,' thus continually expanding the existing tapestry of meanings associated with the term platform. As we have argued, thinking in terms of platform ecosystems enables a thorough exploration of digital platforms, applications, and emerging future platforms, such as the impending "AI platform shift" or the "metaverse," allowing for critical analysis before these platforms become settled and dominant. By investigating the interconnectedness and interdependencies within these ecosystems, we gain a deeper understanding of how platforms operate, shape, and are also themselves influenced by the larger systems they inhabit. This approach enables an integrated understanding of platforms' diverse roles and societal impacts.

Endnotes

1. We use single quotes when emphasizing or referring to the metaphorical nature of terms and double quotes in all other cases.
2. Section 230 of the Communications Act, which was enacted as part of the Communications Decency Act of 1996, offers restricted federal protection to both interactive computer service providers and users.

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