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Creators as firms: the organization of creative production

Karol J. Borowiecki[1] · **Marc T. Law**[2]

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Abstract
Why do creators sometimes act as firms, internalizing the realization of their work, while in other settings they delegate realization to market intermediaries or operate under hierarchical employment? We develop an analytical framework in which creators choose how to organize realization when contracts are imperfectly enforceable and limits on contractual payments constrain transfers to creators. Delegation can reduce coordination burdens by shifting realization to established intermediaries, but may fail to meet creators' participation constraints, making self-integration an endogenous response to contracting limitations. The framework highlights how organizational choice depends not only on coordination costs, but also on the feasibility of contractual transfer and the timing of diffusion. We illustrate the model using the history of Western classical music, where composition and realization are technologically distinct yet jointly required for value creation, yielding a transparent make-or-buy setting. The framework is consistent with the historical evolution from salaried employment under patronage, to entrepreneurial self-organization as markets expanded under weak copyright, and ultimately to delegation under mature intermediation and contracting. It also clarifies why composers sometimes sequenced dissemination—using performance before publication—when the timing of diffusion could not be governed through contract. Similar trade-offs shape creator-intermediary relationships in contemporary creative markets.

Keywords Organizational choice · Firm boundaries · Make-or-buy decisions · Vertical integration · Creative production · Classical music

✉ Karol J. Borowiecki
kjb@sam.sdu.dk

Marc T. Law
marc.law@uvm.edu

1 Department of Economics, University of Southern Denmark, Odense, Denmark

2 Department of Economics, University of Vermont, Burlington, VT, USA

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1 Introduction

When Ludwig van Beethoven organized his monumental "Akademie" concert in Vienna in 1808—renting the Theater an der Wien, hiring musicians, and premiering his *Fifth* and *Sixth Symphonies*—he acted as his own impresario, producer, and performer, internalizing the creative and commercial stages of musical realization.[1] Nearly seventy years later, Johannes Brahms's *First Symphony* was introduced to the public through an established orchestra and distributed by a professional publisher,[2] Both men were leading symphonists of their eras, yet the way their music reached audiences reflected fundamentally different ways of organizing creative production. Beethoven vertically integrated performance and dissemination while Brahms relied on a mature ecosystem of cultural intermediaries to distribute and perform his music. What accounts for this transformation in how composers organized the production of their work?

This puzzle extends well beyond music. Across the arts and creative industries, we observe striking variation in the organization of realization and dissemination. Authors such as Samuel Richardson and Mark Twain internalized publishing and distribution through their own firms, whereas Henry Fielding, Henry James, and William Dean Howells relied on established publishing houses. Early filmmakers including Charlie Chaplin founded their own studios to control production and distribution, while Harold Lloyd and Ernst Lubitsch relied on specialized studios to coordinate those activities. In the digital era, visual artists and musicians may internalize production and distribution through direct-to-consumer platforms, or instead delegate these functions to intermediaries who manage promotion, dissemination, and commercialization. These contrasts raise a general economic question: when do creators operate as firms—internalizing stages of realization—and when do they instead delegate realization through markets or hierarchies?[3]

We develop an analytical framework in which creators choose among alternative organizational forms for realizing their work, balancing the ability to appropriate value against the costs and feasibility of coordinating realization. Under hierarchical employment, realization is undertaken by an employer who controls coordination and dissemination, while the creator relinquishes residual claims over realized

[1] The program also included Beethoven's performance of the *Piano Concerto No. 4* in G major, excerpts from the *Mass in C major*, the concert aria "Ah! perfido", an improvisation, and the premiere of the *Choral Fantasy*. The four-hour event, held in an unheated hall with little rehearsal, stands as the most ambitious concert of Beethoven's career and illustrates his determination to control every stage of production and presentation (Cooper, 2008, p.194).

[2] Brahms' *Symphony No. 1 in C minor* Op. 68 was premiered on November 4, 1876 in Karlsruhe by the Grossherzogliche Hofkapapelle Karlsruhe (Grand Ducal Court Orchestra of Karlsruhe) under the direction of Felix Otto Dessoff (Avins and Eisinger, 1997, p.498). The work was published in 1877 by Fritz Simrock, Brahms's longtime publisher.

[3] In this paper, the term *firm* refers to an organizational form that internalizes transactions and allocates control, rather than a legal entity.

value in exchange for a salary. Market delegation assigns realization to external intermediaries—such as publishers, impresarios, or performing organizations—through arm's-length contracts that reduce the creator's coordination burden and leverage existing realization infrastructure, but limit how much value can be transferred back to the creator through contract and constrain how realization is governed. Under self-integration, the creator retains control over realization and residual claims, but bears the full cost of organizing downstream activities. The optimal organizational form depends on coordination costs and on the contracting environment, specifically, whether delegation can offer terms that satisfy the creator's participation constraint given limits on enforceability and on attainable transfers. The framework highlights multiple margins of organizational choice: which organizational form is adopted, which delegation contracts are feasible, and how diffusion is timed and sequenced when early delegation would dissipate returns that contracts cannot reliably deliver to creators.

Conceptually, our approach builds on transaction-cost and incomplete-contract theories of the firm, but draws on different elements of that literature for distinct purposes. Following Coase (1937) and Williamson (1985), we treat organizational form as a response to the costs of coordinating and governing economic activity when markets and hierarchies differ in their ability to manage contractual frictions. In the spirit of Klein et al. (1978), we emphasize that market delegation may fail even when technologically efficient if contracts cannot reliably sustain surplus allocation, making integration or self-organization attractive.[4] From the incomplete-contracts tradition associated with Grossman and Hart (1986) and Hart and Moore (1990), we draw the emphasis on residual control rights and the limits of contractual transfer when actions and outcomes cannot be fully specified *ex ante*. Adapting these ideas to settings in which production is organized around individual creators rather than corporate firms, we formalize how creators choose among hierarchical employment, market delegation, and self-integration when realization is technologically separable from creation but contractually incomplete. Because key aspects of realization are not contractible and transfer to the creator is constrained by imperfect enforceability and by limits on the size of attainable payments, market delegation may fail to satisfy the creator's participation constraint. Our contribution is not to document new historical facts or to provide a full empirical analysis; rather, we develop a unified contracting framework and use the historical evidence descriptively to illustrate its key margins and comparative statics. Although developed in a historical context, the framework therefore applies equally to contemporary creative industries, where creators face analogous organizational choices under imperfect enforcement.

We apply this framework to Western classical music, examining how the organization of musical production—understood as the realization and dissemination of completed works via performance, publishing, recording, or broadcasting—varied

[4] Unlike Klein et al. (1978), we do not model hold-up or relationship-specific investments. Rather, our framework reflects their broader insight that delegation through market contracting may fail when contractual limitations prevent surplus from being reliably allocated.

with changes in the legal, technological, and market environment.[5] Under court and church patronage, composers typically operated within hierarchical employment relationships. Copyright over musical works was weak, and the fixed costs of independently organizing performance and dissemination made self-integration unattractive; in this setting, centralized employment was the prevailing mode of production. As patronage waned and public concert markets expanded, the potential value of musical works increased, but the contracting environment lagged behind. Composers such as Mozart and Beethoven increasingly internalized performance and concert organization, assuming coordination costs in an environment where market contracts could not transfer comparable returns. With the spread of enforceable copyright in the nineteenth century and the emergence of professional publishers, orchestras, and concert organizations, delegation of realization became more viable. Composers such as Brahms and Tchaikovsky relied on intermediaries to organize dissemination and performance, as contracts could now transfer a sufficient share of returns without requiring direct control over realization. Subsequent technological changes altered these trade-offs in different directions. Mechanical reproduction increased scale economies and organizational costs and coincided with greater intermediation through publishers, recording companies, and broadcasters, while more recent digital technologies have reduced the costs of organizing production and dissemination and are consistent with selective re-internalization of some realization stages.

Classical music offers a uniquely transparent setting for studying how the realization of creative work is organized. In most industries, the boundary between creation and realization is embedded within large organizations and obscured by capital intensity, labor specialization, and scale economies that jointly influence organizational choice, making it difficult to isolate the margin between internal organization and market coordination. By contrast, in classical music the distinction between creation and realization is inherent in the production process and plainly observable. Writing a score and performing or publishing it are technologically separable but economically interdependent: a composition has no economic value unless it is realized, and realization in turn requires the prior act of creation.[6] Each composer therefore confronted a recurring decision over whether to internalize realization or to delegate it to employers or market intermediaries. Because this choice was repeatedly made at the level of individual works or careers, classical music provides an unusually clear view of how coordination costs and contractual incompleteness shape the organization of realization.[7]

[5] In this study, the expression *classical music* is used to describe the long-standing Western art-music tradition, which spans from the Middle Ages to the present. A defining structural feature of this tradition is the division of creative labor: composers set down musical ideas in written form, and performers interpret and realize those ideas in sound, even though individual composers sometimes assumed multiple roles. The term covers a wide spectrum of instrumental, vocal, and stage works intended to be performed and reinterpreted over time. It is important not to equate this broad usage with the *Classical period* (ca. 1750-1820), a narrower stylistic era noted for its emphasis on balance and clarity and associated with Haydn, Mozart, and early Beethoven.

[6] Improvisation—historically significant but not the main vehicle for circulating classical works—is an exception in which creation and realization coincide.

[7] Under patronage, this organizational choice was typically instantiated at the level of accepting, holding, or leaving salaried employment rather than on a project-by-project basis. In market and freelance set-

A second advantage of this setting is its extraordinary temporal scope. Over several centuries, the same creative act—composing music—was embedded in markedly different organizational environments, ranging from hierarchical employment under court and church patronage, to self-organized realization in early concert markets, to delegation through specialized intermediaries under mature copyright. This long-run variation allows us to observe how organizational choices varied with changes in property rights, coordination costs, and market scale while holding the underlying creative task constant. Advances in music printing, mechanical reproduction, and digital distribution changed both the feasibility and the cost of delegating realization and coincided with shifts in the boundary between creators and intermediaries over time. Together, these institutional and technological developments provide a rich setting for analyzing how changes in the economic environment were associated with changes in the organization of realization.

An additional strength of this setting is that composers were identifiable decision-makers whose careers and working arrangements are unusually well documented. Biographical sources record how composers organized performances, negotiated publication, entered or exited employment, and adjusted the timing and extent of delegation as market opportunities and legal regimes evolved. This documentation allows us to trace organizational choice directly at the level of individuals, rather than inferring it indirectly from firm boundaries or ownership structures. Classical music thus provides a rare opportunity to study how creators' choices between delegating and internalizing realization varied over time alongside changes in economic constraints.

Our analysis connects most directly to the make-or-buy literature on firm boundaries. Empirical studies show that organizational form depends on the relative costs of internal coordination versus external transactions, with integration favored when contracting is difficult or asset specificity is high (e.g., Monteverde and Teece, 1982; Masten, 1984; Joskow, 1985; Klein, 1998; Baker and Hubbard, 2003; Acemoglu et al., 2004; Lafontaine and Slade, 2007). While much of this work focuses on modern industrial settings in which scale, capital intensity, and multi-stage production chains embedded within large organizations complicate identification, classical music isolates the make-or-buy margin in a particularly transparent way. Composers faced a recurring decision over whether to internalize downstream activities such as performance and publication, to delegate them to specialized market intermediaries, or to work under hierarchical employment arrangements. By studying these choices in a setting where organizational boundaries are observable at the level of individual decision-makers, the paper brings the logic of the make-or-buy framework directly to bear on the organization of creative production.

This study also relates to work in economic history that uses a transaction-cost perspective to explain how institutions evolve to manage coordination, enforcement, and measurement problems. Greif (1989, 1993) shows how informal coalitions and reputation-based norms facilitated trade in the absence of formal legal enforcement, while Allen's analyses of the British military, aristocracy, dueling, and policing (Allen, 1998, 2002, 2009, 2012; Allen & Barzel, 2011; Allen & Reed, 2006) show

tings, by contrast, composers confronted these decisions repeatedly across individual works.

how organizational rules and bonding/screening devices aligned incentives when monitoring and formal enforcement were costly. These studies emphasize how institutional arrangements adapt to transaction-cost constraints. Our approach differs in scale but shares the same logic: rather than tracing the evolution of institutions themselves, we examine how individual decision-makers optimized their organizational choices within changing institutional and technological environments. By focusing on micro-level organizational decisions in a historically rich setting, the paper complements this literature and links transaction-cost reasoning directly to the organization of creative production.

The analysis also speaks to the literature in cultural economics that examines how economic and institutional environments shape artistic production. Prior work has studied the effects of copyright protection (Giorcelli & Moser, 2020), political competition (Vaubel, 2005), and financial incentives (Borowiecki et al., 2024; Borowiecki & Law, 2026) on creative activity. Earlier contributions by Scherer (2001a, 2001b) document the historical transition from patronage to freelance arrangements, highlighting how changes in market institutions reshaped the organization of composers' creative labor and working arrangements. A complementary strand applies transaction-cost and principal-agent perspectives to modern cultural industries. Caves (2000, 2003) analyze contractual frictions and incentive problems in film and publishing; Chisholm (1993, 1997) study how asset specificity and monitoring costs shape contract choice in Hollywood; and Ceulemans et al. (2011) examine incomplete contracting within creative teams. Relatedly, Etro (2025) develops a dynamic theory of art history centered on apprenticeship, innovation incentives, and patron-artist contracting under imperfect verifiability.

Our contribution differs in focus and level of analysis. Rather than taking organizational form as given and studying how incentives, contracts, or intermediaries shape creative activity within that setting, we treat organizational form as an object of choice and formalize creators' boundary decisions. We develop a framework in which creators decide whether to internalize realization or delegate it to intermediaries when contractual transfer is imperfect, participation constraints bind, and diffusion can be strategically sequenced. In this sense, the paper contributes a unifying organizational perspective to cultural economics, clarifying when and why creative production takes delegated, integrated, or hierarchical organizational form as property rights, technology, and intermediation change over time.

Our analysis also relates to work that emphasizes entrepreneurial aspects of artistic activity. Existing studies examine how artists commercialize their work and adapt organizational strategies to evolving institutional environments (Hoffmann et al., 2021; Srakar & Vecco, 2018), as well as how creative entrepreneurs cluster geographically or pursue cross-border opportunities (Klingner et al., 2021; Noonan et al., 2021). These contributions highlight important behavioral, spatial, and institutional dimensions of creative enterprise. Rather than examining who becomes an entrepreneur or how creative enterprises operate, we analyze when creative production itself takes an entrepreneurial organizational form, that is, when creators internalize the coordination of realization and retain residual control over activities that might otherwise be delegated to intermediaries or hierarchical employers. In this sense, entrepreneurship is treated not as an occupational identity, but as an organizational response to participation constraints, transaction costs, and imperfect contracting (Coase, 1937; Knight, 1921).

The remainder of the paper proceeds as follows. Section 2 develops an analytical framework in which a composer chooses how to organize the production of a completed work—internalizing realization, delegating through market contracts with intermediaries, or operating within hierarchical employment—subject to participation constraints and contractual incompleteness. The framework helps clarify how contractual feasibility, coordination costs, and the potential value of creative output jointly influence organizational choice, and how imperfect contracting introduces additional margins such as the timing and geographic sequencing of delegation. Section 3 applies these mechanisms to the evolution of musical organization from the seventeenth to the twenty-first centuries, tracing how changes in copyright protection, intermediation, and market scale coincided with shifts in the boundary between composers and downstream realization. Section 4 examines exceptional composers within their historical settings to illustrate how the same organizational logic helps account for departures from the modal pattern. Section 5 connects the framework to contemporary creative industries, highlighting how similar trade-offs arise in relationships between creators and intermediaries in environments shaped by digital platforms and new technologies. Section 6 concludes.

2 Analytical framework

2.1 Creation and realization

A composer produces a work that has potential economic value but which must be realized before that value can be captured. Realization requires downstream activities such as performance, copying, publication, or recording, that determine how widely and effectively the work reaches audiences. These activities are technologically distinct from creation and require coordination and organization.

We treat the creative act itself as given and abstract from compositional effort. Let $V(e)$ denote the value generated by a work under realization effort e, where $V'(e) > 0$ and $V''(e) < 0$. Realization effort refers exclusively to downstream activities—such as organizing performances, copying, publication, or dissemination—supplied by whoever controls realization, and does not affect the intrinsic quality of the work. Supplying realization effort entails a variable cost $c(e)$ that is increasing and convex in e; we assume this variable effort cost is the same regardless of whether effort is supplied by the composer or an intermediary. Organizational forms differ in fixed coordination burdens: under self-organization, the composer incurs a fixed setup cost $k \geq 0$, reflecting the financial, managerial, and logistical costs of assembling coordination infrastructure. Under delegation, the intermediary supplies e using coordination infrastructure that is already in place, so k is not incurred at the margin for a given work.

The organizational problem is therefore to choose how realization is governed.

2.2 Employment

Under hierarchical employment, the composer is employed by a patron or organization and receives a salary of s. The employer controls realization decisions and bears the associated coordination costs. The composer's payoff is $\Pi_E = s$. Employment centralizes realization and insulates the composer from market outcomes, but eliminates participation in upside returns. It serves as a benchmark organizational form.

2.3 Vertical integration

Under self-organization, the composer internalizes realization and directly chooses realization effort e. Integrated realization yields payoff $V(e) - c(e) - k$. Let

$$e^{FB} = \arg\max_e \{V(e) - c(e)\}$$

denote first-best realization effort. The composer's payoff under integration is $\Pi_I = V(e^{FB}) - c(e^{FB}) - k$. Integration avoids contractual distortions and preserves residual control over realization, but requires the composer to bear fixed coordination costs.

2.4 Market contracting and delegation

Alternatively, the composer may delegate realization to an intermediary such as a publisher, impresario, orchestra, or performing organization. The intermediary supplies realization effort e, while the composer's compensation is determined contractually. The intermediary's effort is not directly contractible; contingent payments can condition only on realized value to the extent it is enforceable and verifiable.

Delegation is voluntary. Let the composer's outside option be $\Pi^O = \max\{\Pi_E, \Pi_I\}$. Any contract must satisfy the composer's participation constraint $\Pi^{\text{contract}} \geq \Pi^O$. We consider two canonical contract forms.

2.4.1 Fixed-fee contracts

Under a fixed-fee contract, the intermediary pays a lump sum F to the composer and retains all realized value. The intermediary chooses effort to maximize $V(e) - c(e)$, yielding e^{FB}. Fixed-fee delegation therefore induces efficient realization effort. However, intermediaries may face limited pledgeability. Let $\bar{F}$ denote the maximum attainable fixed fee, interpreted as the largest pledgeable transfer the intermediary can credibly make (e.g., bounded by limited commitment, financing constraints, and/or the intermediary's break-even condition). We treat $\bar{F}$ as primarily governed by slow-moving factors—such as liquidity, collateral, or access to outside finance—that need not rise proportionally with the potential value V. This captures the idea that even as a work's upside increased, intermediaries could face binding limits on lump-sum payments, while still expanding downstream realization once demand materialized.

Fixed-fee delegation is feasible if and only if $\bar{F} \geq \Pi^O$. Thus, fixed-fee contracts may fail not because they distort incentives, but because they cannot transfer sufficient surplus to satisfy the composer's participation constraint.

2.4.2 Value-contingent contracts

Alternatively, the composer's compensation may be contingent on realized value. Let the composer receive a share $r \in (0,1)$ of realized value. In practice, collection and enforcement are imperfect, so the composer can only obtain a fraction $\theta \in [0,1]$ of the implied value-contingent claim.[8] The intermediary chooses effort to maximize $(1-r)V(e) - c(e)$, yielding effort $e^R < e^{FB}$. The composer's payoff is $\Pi^R = \theta r V(e^R)$. Value-contingent contracts can ease limits on fixed-fee transfers, but they weaken realization incentives and depend on enforcement and verification.

2.5 Organizational choice

Delegation through market contracting is feasible if and only if the composer can be offered at least Π^O under some contract. Under a fixed-fee contract the composer receives a fixed payment F, which is bounded above by $\bar{F}$, the maximum fixed payment an intermediary can pay. Under a value-contingent contract the composer receives an enforceable share θr of realized value, yielding payoff $\theta r V(e^R)$. Delegation is therefore feasible if

$$\max\{\bar{F},\ \theta r V(e^R)\} \geq \Pi^O.$$

Three cases arise. If $\bar{F} \geq \Pi^O$, fixed-fee delegation occurs with efficient realization. If fixed fees are infeasible but enforcement is sufficiently strong, value-contingent delegation may occur despite distorted effort on the part of the intermediary. If neither contract satisfies the participation constraint, delegation fails and the composer relies on employment or vertical integration.

2.6 Timing, control, and diffusion

The baseline framework abstracts from the timing of dissemination; we now allow diffusion to unfold over time and treat the pace and scope of release as a control decision that is difficult to govern contractually. Even when delegation is contractually feasible in the participation-constraint sense, the creator's preferred diffusion path need not be implementable by contract. Intermediaries often have incentives to accelerate diffusion—through faster publication, broader geographic release, or more aggressive commercialization—because they monetize scale and portfolio complementarities, while creators may value preserving early performance rents or control

[8] We interpret θ as imperfect enforceability/collectability of the creator's *contractual claim* on realized revenues (e.g., under-reporting, delayed payment, or costly monitoring and litigation), rather than as a reduction in total surplus. Accordingly, θ scales the creator's receipts while leaving the intermediary's marginal return from effort unchanged.

over sequencing. When diffusion decisions are only partially contractible, delegation can satisfy participation while still failing to implement the creator's preferred diffusion path.[9]

We now extend the framework to settings where diffusion timing and scope are difficult to specify and enforce contractually. To isolate this mechanism cleanly, we abstract from the effort and contract-form margins analyzed earlier and focus directly on the organizational choice over when and how broadly to disseminate a completed work.[10] This extension clarifies when creators prefer to bear coordination costs in order to retain control over early dissemination, making timing and sequencing an additional organizational margin alongside the delegation decision itself.

Timing is relevant both when delegation is infeasible (requiring self-organization of realization) and when delegation is contractually feasible but contracts cannot fully govern diffusion paths. In such settings, creators face a choice: allow dissemination to proceed immediately (accepting rapid diffusion and its consequences for appropriable returns), or retain control over early dissemination and delay broader diffusion to preserve rents before the work circulates widely. In music, diffusion operates primarily through live performance and publication, which differ in how quickly they disseminate a work and in how effectively returns can be appropriated. The organizational problem is therefore not only whether realization is delegated, but when diffusion occurs and how much control the composer retains over it.[11]

For this extension, we write payoffs directly in terms of the creator's effective returns from performance and publication, abstracting from the explicit contracting problem studied earlier. Let the realized value of a work have two components: performance value V_P and publication value V_B. Performance generates value through live realization, which may be locally appropriable by the composer when access, frequency, and the diffusion of the work through additional performances are controlled. Publication expands market reach but accelerates diffusion and imitation. We use $\theta \in [0, 1]$ throughout as a reduced-form measure of enforceability of claims on realized value; here it denotes the collectable share of publication value that can be captured and transferred to the composer, reflecting accounting, verification, and legal enforcement.

Early publication reduces performance rents by accelerating diffusion. Let $\lambda \in [0, 1]$ denote the fraction of performance value dissipated when publication occurs early, reflecting the loss of novelty and imitation once the work circulates in written form.

[9] We do not claim that a calendar release date is never contractible. The point is narrower: the relevant diffusion decision is typically multi-dimensional—sequencing across jurisdictions, editions, marketing intensity, enforcement against unauthorized copying, and complementary uses (arrangements, adaptations, excerpts). These components can be costly to specify, monitor, and enforce, especially across locations and legal regimes. Historically, embargoes and staged premieres were sometimes used, but the broader diffusion path often remained only partially contractible.

[10] This timing extension is conceptually distinct from contract form (fixed fees versus value-contingent claims): it concerns control over the pace and scope of diffusion, which may be difficult to specify and enforce under either arrangement.

[11] Delaying diffusion need not imply self-publication. In the framework, it reflects retaining control over early dissemination and postponing publication; publication may ultimately be handled by an intermediary or by the creator.

More generally, performance rents may also be eroded by the expansion of performances beyond scarce, tightly controlled settings. We capture this effect with a reduced-form control parameter $\gamma \in (0, 1]$, which measures the share of performance value the composer retains as performances become more frequent or geographically widespread. When performances remain limited or carefully sequenced, γ is close to one; when performances proliferate across venues or locations, competition intensifies and γ falls.

Together, λ and γ capture distinct sources of rent dissipation, reflecting diffusion through publication and diffusion through performance, respectively; either mechanism may operate independently, and both apply when diffusion occurs along both margins.

To keep the analysis transparent, we focus on two polar timing strategies. Under *early diffusion*, publication occurs early and live performances expand rapidly across venues, reducing performance rents along both margins,[12] Under this scenario, the composer's payoff is

$$\Pi_0 = \gamma(1-\lambda)V_P + \theta V_B.$$

Under *delayed diffusion*, the composer postpones publication and limits early realization in order to preserve performance rents. Retaining such control requires bearing coordination and organizational costs $k \geq 0$, while delaying publication discounts publication value by a factor $\delta \in (0, 1]$. The composer's payoff is

$$\Pi_1 = V_P - k + \delta\theta V_B.$$

Delayed diffusion is preferred when

$$\big[1-\gamma(1-\lambda)\big]V_P \geq k + (1-\delta)\theta V_B.$$

Delayed diffusion is optimal when the incremental gain in performance rents—by avoiding early dissipation through publication and rapid performance expansion—exceeds the fixed costs of coordination *k* and the discounted loss of publication value $(1-\delta)\theta V_B$. Control over timing can therefore operate as an organizational response to imperfect contractibility of diffusion. When early publication and/or rapid performance expansion would dissipate performance value that cannot be secured through arm's-length contracting, composers retain control over the timing of early realization and delay broader diffusion until initial performance value has been realized.

The same logic applies to the geographic scope of realization. Extending realization to additional cities expands market reach, but it can also accelerate diffusion across jurisdictions in ways that are difficult to govern contractually, especially

[12] Consider a composer with a new piano concerto. Under *early diffusion* the score is published immediately, dissipating a fraction λ of performance rents by eliminating novelty and facilitating imitation. Performances also expand quickly across venues; as they proliferate, competition further reduces the share of performance value the composer can appropriate, captured by a lower γ. Early publication may accelerate this expansion, but λ and γ distinguish publication-driven dissipation from the additional erosion associated with performance proliferation.

when protection against copying or imitation differs across borders. Concentrating realization in a limited set of locations preserves more locally appropriable value, but delays access to other markets. In the framework, geography therefore creates a choice between broad, rapid release across places and more limited initial release with later expansion. When contracts cannot reliably protect returns across jurisdictions, expanding too quickly can reduce what the creator can capture, creating incentives either to delay expansion into additional markets or to coordinate releases across markets to limit exposure to unauthorized reprints and rapid imitation.

2.7 Implications for organization

The framework has several implications for organizational choice. Delegation through market contracting is more likely when contracts can transfer sufficient surplus to creators. Fixed-fee contracts induce efficient realization but may be infeasible when intermediaries face limited pledgeability, while value-contingent contracts, such as royalties or revenue shares, can reduce reliance on large up-front payments but depend critically on enforceability, since compensation is tied to realized revenues that may be difficult to verify or collect. When enforceability is weak or pledgeability is limited, delegation may fail even when intermediaries can realize value efficiently. Holding coordination costs and contractual frictions fixed, increases in the potential value of creative output raise creators' outside options and tighten participation constraints, making delegation more difficult to sustain. In such settings, creators internalize realization despite higher coordination costs because market delegation cannot reliably transfer enough surplus to meet their outside option. Vertical integration is therefore more likely when the potential value of realization is high relative to what can be transferred contractually, and when the value of creators' outside options rises faster than feasible contractual payments. By contrast, hierarchical employment dominates when neither market delegation nor self-organization is viable. This occurs when pledgeability is insufficient to support fixed-fee delegation, enforceability is too weak to sustain value-contingent contracts, and independent coordination and dissemination are prohibitively costly while salaried arrangements provide high and stable compensation.

Imperfect contracting also introduces timing and sequencing as an additional organizational choice margin because diffusion decisions are difficult to govern by contract and maintaining full control through integration can be costly. A completed work can generate value through multiple realization channels—most notably performance and publication—which differ in how quickly they diffuse the work and in how effectively returns can be appropriated. When early delegation would accelerate diffusion and erode locally appropriable rents that cannot be recouped contractually, creators may retain control over early dissemination—whether because delegation is infeasible or because immediate delegation is not payoff maximizing—and delegate more broadly only after initial performance rents have been realized. Delayed delegation, illustrated by performance preceding publication, is therefore more likely when live performance constitutes an important source of value, when early publication accelerates diffusion and reduces performance rents, when limits on enforceability restrict how much publication value can be transferred through contract, and when early performances can be organized at relatively low coordination cost. Across settings, as enforceability improves or as publication becomes the dominant source of value, the benefits of delay diminish and delegation occurs earlier.

3 The historical evolution of musical organization

The analytical framework developed above yields clear implications for how realization is organized when contractual transfer is limited by imperfect enforceability and constraints on up-front payments. The historical discussion that follows applies this framework to the evolution of musical production from the late eighteenth century onward. In doing so, we treat changes in copyright enforcement, intermediation, technology, and market scale as evolving jointly rather than as exogenous shocks, and we use the historical material descriptively—documenting patterns consistent with the framework—rather than treating the timing of changes as providing causal identification. Each period corresponds to a distinct configuration of salaries, copyright enforcement, coordination costs, and market scale, which together shaped whether realization was organized through hierarchical employment, market delegation, or self-integration. The analysis also emphasizes timing and sequencing—particularly the relationship between performance and publication—as organizational choices that became salient when delegation could not transfer sufficient surplus, but full integration was costly to sustain. Figure 1 in Appendix provides illustrative evidence from biographical sources on long-run trends in composers' organizational arrangements, which broadly track the historical narrative in this section.

Throughout the historical discussion, we treat hierarchical employment, market delegation, and self-integration as stylized organizational arrangements. In practice, composers often combined market intermediation with selective self-organization, for example, delegating publication while retaining control over performance timing, sequencing, or particular revenue streams, or organizing concerts while relying on managers and venues for implementation. The framework is therefore not a literal classification of who performs each task, but a way of organizing how control rights, residual claims, and coordination responsibilities are allocated when contracting is incomplete. In the language of the model, market scale maps into the potential value of realization and technology and organizational infrastructure map into coordination costs. Copyright enforcement reduces unauthorized copying and imitation, raising intermediaries' expected revenues and supporting larger upfront fixed fees; improvements in accounting, verification, and legal enforcement also expand the enforceable share of value-contingent payments (θ). Together these forces determine whether delegation can satisfy participation and, when it can, whether it dominates integration or employment. A central implication is a race between market scale and the contracting environment. When the potential value of realization and creators' outside options rise faster than enforceability and transferable surplus, delegation may fail to satisfy participation constraints and composers have incentives to self-integrate; when enforcement and intermediation catch up, delegation becomes more likely to satisfy participation and to dominate self-organization.

3.1 Early modern patronage

In the Baroque and Classical eras, the production and dissemination of music was dominated by courts, churches, and civic institutions (Spitzer & Zaslaw, 2004; Weber, 2004). Composers worked as salaried employees in these hierarchical organizations, supplying music for liturgy, ceremony, and entertainment. Under these arrangements, employers exercised centralized control over realization: they owned or managed the performing ensembles, determined when and where works were presented, and financed the copying and preparation of materials. Markets for music intended for public sale or performance outside patronage were limited: travel was costly, public concerts were rare, and music printing remained technically demanding and financially risky. Although commercial publishing houses began to appear in the early eighteenth century—Estienne Roger in Amsterdam (active from the 1690s), John Walsh in London (active 1700–1736), and Breitkopf in Leipzig (founded 1719, later Breitkopf & Härtel)—their reach remained narrow.[13] Unauthorized reprints were common, and composers seldom received substantial remuneration from publication.

In terms of the framework, early modern patronage is characterized by high and stable salaries, weak enforceability of claims on musical works, and high fixed costs of independent coordination and dissemination. These conditions made both market delegation and self-organization relatively unattractive. Arm's-length contracting could not reliably transfer value to composers in the absence of effective copyright enforcement, while limited market scale constrained potential returns. At the same time, organizing performances or publication independently required access to ensembles, venues, and copying infrastructure that were largely available only through courts, churches, and civic bodies. Under these conditions, centralized employment dominated because it was the least costly and most reliable way to realize musical works under prevailing legal and organizational constraints.

These patronage arrangements are visible in the careers of Johann Sebastian Bach (1685–1750), Antonio Vivaldi (1678–1741), and Joseph Haydn (1732–1809). Bach spent most of his in salaried posts that defined both his creative output and its realization. As court organist and concertmaster in Weimar (1708–1717), Kapellmeister in Kööthen (1717–1723), and later as Cantor of the Thomasschule in Leipzig (1723–1750), Bach composed music tailored to the needs of specific employers, ensembles, and occasions. In each case, realization was governed by the employer: performances were scheduled internally, musicians were provided by the employer, and dissemination beyond local use was limited.(Wolff, 2000). Vivaldi, attached to the Ospedale della Pietà in Venice, likewise composed for a resident ensemble supported by charitable endowments and public benefactors (Talbot, 1978), with realization tightly linked to the Ospedale's organizational structure. Haydn, during his long service at the Esterházy court, worked under comparable conditions, with his employer financing copying, rehearsals, and performances and exercising control over when and where his works were presented.[14]

[13] See Rasch (2005) for details on the early music publishing industry.

[14] Later in his career, however, Haydn secured unusual contractual privileges. By the 1770 s, Prince Nikolaus Esterházy permitted him to publish works independently and retain the proceeds, reflecting his inter-

3.2 Emerging markets under weak property rights

By the late eighteenth century, the organization of creative labor was being transformed. Urbanization, rising middle class wealth, and the growth of public concert life were accompanied by an expansion of audiences beyond the court and church. Cities such as Vienna, London, Paris, and Leipzig supported concert societies, subscription series, and opera houses that demanded a steady supply of new music (Weber, 2008). Aristocratic and ecclesiastical patronage weakened, making salaried employment less abundant and less secure. The potential value of musical output rose sharply as markets expanded, but the institutions governing appropriation and contracting lagged behind these changes. Copyright protections for musical works remained weak and fragmented even as market potential expanded. Early copyright statutes—most notably the English Statute of Anne (1710)—offered only partial protection and applied primarily to printed editions rather than performances. The Bach v. Longman decision of 1777, in which Johann Christian Bach (1735–1782)—youngest son of Johann Sebastian Bach—successfully argued that musical compositions qualified as "writings" under the statute, clarified copyright in printed music but left performance rights and international enforcement largely unprotected. Unauthorized copying and cross-border piracy remained pervasive. Put differently, market scale raised the value at stake faster than the contracting environment could support. In the language of the framework, contractual transfer to composers was constrained so the gap between total value and contractually captured value widened as market potential expanded.[15]

At the same time, coordination costs declined modestly. Improvements in transportation and communication facilitated touring and correspondence; professional copyists and engravers could be hired on demand; and commercial publishers and impresarios offered partial intermediation. These developments lowered but did not eliminate the fixed costs of organizing realization. Delegation through market contracting remained constrained. Weak and fragmented copyright protection limited publishers' ability to appropriate revenues from dissemination—given unauthorized reprinting and weak cross-border enforcement—which in turn constrained how much compensation could be transferred to composers. In this environment, composers adjusted not only whether to delegate realization, but also when and where to do so. A common pattern was to delay full delegation until rents had been captured through performance. By determining the timing, sequencing, and geographic scope of dissemination—and when rights were transferred to publishers—composers retained residual control over realization. Because these margins could not be reliably governed by contracts, retaining authority over them could help composers to appropriate value that arm's-length delegation could not deliver.

Wolfgang Amadeus Mozart (1756–1791) illustrates this logic. After leaving the employment of the Archbishop of Salzburg in 1781, he organized subscription concerts in Vienna, hired musicians directly, and promoted performances to paying audiences (Scherer, 2004; Solomon, 1995). Many of his piano concertos were written for

national reputation and the court's recognition of his artistic stature. See Landon (1978).

[15] See Scherer (2004) and Seville (2006) for more details on early copyright.

these events and premiered in performance before being published. In the framework, early publication would have accelerated diffusion and dissipated performance rents, while the contractual payments available from publishers remained small relative to the value at stake, making delegation unattractive relative to performance-based realization. Premiering works in concert can be understood as a way to preserve appropriable rents when contracts could not credibly govern diffusion or transfer sufficient surplus.

Ludwig van Beethoven (1770–1827) extended this strategy by managing both when and where his works diffused. He carefully controlled manuscript circulation, supervised premieres, and often delayed publication until key performances had occurred. He also exploited jurisdictional fragmentation by selling the same work to different publishers in Vienna, London, and Paris, converting what might otherwise have been lost to unauthorized reprints into multiple fixed payments (Lockwood, 2003). Separately, Beethoven controlled the timing and location of premieres and releases, using staggered performances and delayed publication to capture performance rents before wider diffusion eroded novelty and intensified imitation. In the language of the framework, these margins of control were valuable precisely because arm's-length delegation could accelerate diffusion while limiting the composer's ability to preserve locally appropriable returns.

By the 1820 s and 1830 s, a younger generation of composers began to delegate aspects of realization earlier, though still selectively, as intermediation and contracting capacity began to catch up to expanding markets. Professional publishers such as Breitkopf & Härtel, Peters, and Schlesinger offered more predictable and, relative to earlier periods, larger lump-sum payments, providing a stable, if limited, income stream. Composers such as Felix Mendelssohn (1809–1847), Frédéric Chopin (1810–1849), and Robert Schumann (1810–1856) combined these arrangements with continued involvement in performance, teaching, editing, or conducting, delegating where tasks were readily contractible while retaining control over activities that were poorly governed by contracts (Daverio, 1997; Samson, 1996; Todd, 2003).

Frédéric Chopin's publication strategy illustrates this transitional logic. He negotiated near-simultaneous publication contracts in Paris, London, and Leipzig, reducing exposure to cross-border unauthorized reprints. While enforceability remained imperfect, contracting capacity and publishers' expected revenues improved relative to Mozart's or Beethoven's era, supporting larger fixed payments and making earlier delegation easier to implement. In the framework, Chopin's strategy reflects the value of coordinating publication across jurisdictions when cross-border protection is uneven: by aligning releases across major markets, he reduced exposure to opportunistic reprinting while relying on publishers for dissemination.

3.3 Mature copyright and professional dissemination

By the middle of the nineteenth century, the organization of musical production shifted as improvements in enforceability and intermediation began to catch up with expanding markets. Hierarchical employment under patronage had largely vanished, but composers no longer needed to internalize downstream activities to the same extent as earlier generations. Instead, a growing set of specialized intermediaries—

publishers, orchestras, concert societies, and impresarios—became capable of realizing and disseminating musical works on a scale that individual composers could not efficiently manage on their own.

Two developments were central to this period. The first was the consolidation and international extension of copyright protection. National statutes such as Prussia's Copyright Act of 1837 and Austria's of 1846 were gradually supplemented by international agreements, culminating in the Berne Convention of 1886, which established reciprocal reproduction rights that endured into the twentieth century (Laing, 2004; Seville, 2006). These legal frameworks improved protection across borders, expanding the set of feasible delegation contracts and making it more likely that delegation satisfied composers' participation constraints.

The second was the professionalization of creative intermediaries such as publishers, orchestras, and concert organizations. Firms such as Breitkopf & Härtel, Peters, Schott, and Simrock, achieved scale economies in engraving, printing, and international distribution, while later entrants such as Bote & Bock and Universal Edition (founded in 1901) extended this organizational model into the early twentieth century. (Rasch, 2005). Meanwhile, newly professionalized performing organizations—including the Vienna Philharmonic and the New York Philharmonic (both 1842), and, later, the Berlin Philharmonic (1882), the Royal Concertgebouw Orchestra (1888), and the Czech Philharmonic (1896)—provided reliable platforms for the presentation of new works (Weber, 2008). Importantly, these organizations centralized coordination and dissemination within specialized intermediaries that operated at scale. Delegation may have become attractive not only because contractual claims were more enforceable, but also because intermediaries could realize and disseminate works at scale, lowering the effective coordination burden of delegation relative to composer-led organization.

In this environment, composers increasingly delegated realization earlier and more completely than in the preceding period. Rather than organizing performances themselves or carefully controlling manuscript circulation, composers relied on publishers and professional performing organizations to coordinate dissemination across multiple markets. This shift did not imply a loss of artistic authority, but rather a reallocation of control consistent with improved contracting conditions. Composers continued to negotiate terms, approve editions, and influence premieres, but no longer needed to internalize realization in order to appropriate returns.

The careers of Johannes Brahms (1833–1891) and Pyotr Ilyich Tchaikovsky (1840–1893) exemplify this pattern. Brahms contracted almost exclusively with Fritz Simrock, who managed engraving, printing, and distribution across Europe (Schmitz, 2019). His symphonies were premiered by established orchestras under professional conductors such as Hans von Bülow, reflecting a world in which publishers and performing organizations efficiently handled dissemination. Tchaikovsky likewise relied on his publisher Pyotr Jurgenson for both publication and promotion, and benefited from the expanding network of theaters, conservatories, and orchestras in imperial Russia. In both cases, delegation was sustained by an environment in which intermediaries could offer attractive terms—typically through larger and more reliable up-front payments and, increasingly, more enforceable revenue-linked claims—reducing the need for direct self-organization (Brown, 2006).

For the next generation of composers, long-term relationships with established publishers became standard. For example, Claude Debussy (1862–1918) and Maurice Ravel (1875–1937) were represented by Durand, Edward Elgar (1857–1934) by Novello and later Boosey & Hawkes, Jean Sibelius (1865–1957) by Breitkopf & Härtel, and Richard Strauss (1864–1949) by Adolph Fürstner.[16] These arrangements supported wide dissemination without requiring composers to internalize production or distribution, consistent with an environment in which delegation through market contracting became more broadly viable.

3.4 Recording, broadcasting, and the digital era

The early twentieth century introduced technologies that reshaped both the scale and the organization of musical realization. Advances in recording and radio broadcasting, together with the emergence of synchronized film music, expanded audiences far beyond the concert hall, sharply increasing the potential value of musical output. At the same time, these technologies introduced new, capital-intensive stages of realization—studio recording, pressing, broadcast infrastructure, and distribution networks—that were costly to coordinate independently (Gronow & Saunio, 1999; Schmidt-Horning, 2013). New legal categories governing mechanical, performance, and neighboring rights expanded the formal scope of appropriation, but divided claims across multiple uses and intermediaries, each governed by distinct contracts and enforcement mechanisms. In the framework, these developments raised the potential scale of returns while simultaneously raising the fixed costs of independent realization.

Specialized intermediaries—record labels, broadcasters, and film studios—came to occupy a central role in this environment. Much as major publishers and professional performing organizations did in the nineteenth century, these intermediaries absorbed the fixed costs of realization and controlled access to mass audiences. In terms of the framework, market scale rose sharply, but the feasibility of self-organization lagged because coordination costs were high. For most composers, delegation to such intermediaries was a response to cost and coordination constraints: organizing large-scale realization independently was often privately infeasible, while contracting with major intermediaries provided access to markets that could not otherwise be reached. In this setting, dissemination was generally delegated, even as contractual control over timing, quality, and diffusion remained imperfect.

Within this setting, organizational outcomes varied with which margins of realization composers could realistically retain control. While the performance task itself—musicians, venues, studio labor—was almost always delegated, some composers retained authority over when and how early realization occurred. Control over first performances, initial recordings, or the sequencing of release across media became an important organizational choice when contracts could not fully govern timing, quality, or diffusion. Retaining control over these margins gave composers scope to shape how works entered circulation without internalizing the full realization pro-

[16] For details on composer-publisher relationships during this period, see Strykowski (2018), Moore (1984), Goss (2009), Nichols (2001) and Simeone (2001).

cess, playing a role analogous to performance-before-publication strategies in earlier periods.

Igor Stravinsky (1882–1971) and Benjamin Britten (1913–1976) illustrate this logic. Although dissemination of Stravinsky's works depended on publishers, orchestras, and record labels, he exercised close oversight over early realization by conducting premieres and supervising initial recordings, shaping the timing and interpretation through which his works entered circulation at a stage when contractual control was limited (Walsh, 1999, 2006). Britten similarly retained control over early realization by creating platforms—most notably the English Opera Group and the Aldeburgh Festival—through which his works could be premiered under conditions he largely directed, even though performances still relied on hired musicians and existing venues (Carpenter, 1992). In both cases, composers delayed full delegation along non-contractible margins where early diffusion risked dissipating value, and relied on intermediaries for broader dissemination after they had exercised control over premieres and initial recordings.

Other organizational responses coexisted within the same technological environment. Film studios such as Warner Bros. internalized nearly all stages of production, recording, and distribution, with composers such as Erich Wolfgang Korngold (1897–1957)—trained in Vienna's late Romantic tradition and already an acclaimed opera composer—working under long-term contracts that transferred residual control to the studio. In our model, these arrangements correspond to hierarchical employment, with coordination costs absorbed by the employer and compensation determined by salary rather than residual claims (Carroll, 1997). In that respect, they echo earlier patronage-era employment arrangements, even though the realization technology and market scale were entirely different.

In popular music and jazz, similar trade-offs appeared. Louis Armstrong (1901–1971) operated within an environment dominated by record labels and promoters who largely controlled recording schedules, release timing, and distribution, constraining his ability to influence the sequencing of realization. Duke Ellington (1899–1974), by contrast, organized and managed a permanent orchestra, which was unusual relative to most jazz musicians of the period. While dissemination of recordings still relied on intermediaries, Ellington retained control over a broader set of realization margins—particularly touring, repertoire, and the sequencing of performance and recording—than was typical in a recording-dominated market. In this setting, recording often followed, rather than dictated, live performance, which may have helped Ellington to appropriate value through controlled performance before broader dissemination.[17]

As recording and distribution technologies evolved, coordination costs declined, enabling new forms of selective reintegration. When coordination costs fall, high-value creators can reclaim control over timing and residual claims even in otherwise well-developed intermediary markets. The Beatles' creation of Apple Records and more recent examples such as Taylor Swift's re-recordings illustrate how rising bargaining power and declining coordination costs are associated with efforts by high-value creators to reclaim control over release timing and residual claims while

[17] On Ellington's organizational control, see Cohen (2010); on Armstrong's contractual and managerial constraints, see Teachout (2009).

still relying on intermediaries for market access (Neeranjan, 2023; Spizer, 2021). Independent musicians likewise use digital platforms to self-produce and distribute at low cost, while many creators continue to operate under arrangements functionally equivalent to employment or tightly governed market contracting. Across these cases, organizational form varies with changes in market scale, enforceability, coordination costs, and the feasibility of transferring surplus through contracts. The same comparative statics identified in earlier periods continue to shape creative organization, even as technologies and legal environments evolve.

4 Exceptional composers within historical regimes

While the preceding sections describe the dominant organizational arrangements within each historical period, individual composers sometimes occupied atypical positions within those environments. From the perspective of the framework, such cases reflect unusual configurations of the same underlying parameters. Differences in reputation, access to capital, or scale of demand could lower effective coordination costs, raise outside options (so delegation must transfer more surplus to satisfy participation), or widen the gap between total value and what could be transferred contractually. These cases illustrate how the model's comparative statics explain cross-sectional variation in organizational form among creators facing the same broader legal and market environment.

The career of George Frideric Handel (1685–1759) illustrates how unusually high market potential could support self-organization even within a patronage-dominated environment. Operating in eighteenth-century London—a large and commercially vibrant market—Handel faced substantial upside from public performance of his operas. At the same time, the contractual environment limited how much of that upside could be transferred to him under arm's-length market delegation, while salaried employment would have provided income security but little participation in realized value.[18] From the perspective of the model, neither employment nor delegation was likely to satisfy Handel's participation constraint when expected returns were large. In this environment, he founded and managed multiple opera companies, internalizing realization despite high coordination costs in order to appropriate returns that could not be secured through contracts (Burrows, 1996).

Franz Liszt (1811-1886) represents an exceptional case in the mid-nineteenth century, when most composers increasingly relied on delegation to publishers and concert organizations. Liszt's international reputation generated highly predictable demand for his appearances across locations, potentially lowering the risk of organiz-

[18] Although box-office receipts could sometimes be recorded, performance-based revenue sharing was not easily standardized or enforced across venues and seasons. Compensation therefore often took the form of fixed fees, benefit performances, or returns tied to managerial/entrepreneurial roles, rather than ongoing, systematically collected claims on performance receipts. In addition, opera managers bore substantial demand risk and up-front costs, which limited the size of advances they could offer when expected returns were uncertain.

ing tours and concerts (Gooley, 2004; Walker, 1983).[19] In terms of the framework, his reputation raised the potential value of performance realization and reduced the effective coordination cost of organizing performances under his direction by reducing uncertainty and the need for advance financing or risk-sharing. Under these conditions, composer-led organization of touring and performance became viable in an environment where market contracting was otherwise the norm. Importantly, self-organization here concerns control over the coordination of performances, not the elimination of intermediation: Liszt continued to rely on established publishers for dissemination and on local venues and ensembles for production inputs, while retaining residual control over timing, sequencing, and performance revenues. His organizational choices are consistent with an equilibrium response to unusually favorable parameters—high performance-side value combined with low effective coordination costs of organizing tours and concerts—rather than a general shift away from intermediation. Later in life, Liszt combined this selective self-organization of touring and performance with salaried employment in Weimar, illustrating how hierarchical employment and selective self-organization could coexist within a single career as economic conditions evolved.

Richard Wagner (1813–1883) illustrates how self-organization can arise even in an environment where market contracting is institutionally available. By the mid-nineteenth century, professional theaters, impresarios, and improving copyright protection coincided with delegation becoming a viable option for most opera composers. Wagner nevertheless internalized realization by founding the Bayreuth Festival, retaining centralized control over performance conditions, staging, and dissemination (Spotts, 1994). His case also highlights how the nature of the work itself can amplify contracting problems. Wagner's operas departed sharply from established conventions of orchestration, staging, and dramatic structure, rendering early realization especially consequential for how audiences and critics assessed their value.[20] In such settings, poorly governed early performances risked lowering perceived value and long-run demand in ways that were difficult to contract on or remedy *ex post*. This raised the expected loss from delegation, increasing the effective cost of market contracting relative to integration and strengthening Wagner's incentive to retain centralized control over realization. Viewed from the perspective of the framework, delegation was unattractive not because intermediation was unavailable, but because available arrangements could not jointly deliver sufficient surplus transfer and adequate control over non-contractible margins of realization. Crucially, Wagner's effective coordination costs were also reduced by substantial royal subsidies from Ludwig II of Bavaria, which lowered the private cost of integration without transferring residual control. In this setting, integration can be understood as an endogenous response when delegation could neither transfer enough surplus at the relevant scale of value nor secure the desired control rights.

[19] Heinrich Heine coined the term "Lisztomania" ("Lisztomanie") to capture the intensity and breadth of demand for Liszt's appearances, which helped make touring revenues unusually predictable across cities.

[20] Wagner's emphasis on the *Gesamtkunstwerk* ("total artwork") heightened the value of controlling staging, interpretation, and other early realization margins that are difficult to specify and enforce contractually.

Philip Glass (1937–) provides a late twentieth-century example of self-organization in a mature copyright environment where delegation was widespread but not necessarily attractive on the margins most relevant to the creator. Known for minimalist works that circulated far beyond the concert hall, especially through recordings and use in film and other audiovisual media, Glass brought key publishing functions in-house—most notably through Dunvagen Music Publishers (founded in 1977)—and organized performances through the Philip Glass Ensemble (Potter, 2000). In terms of the model, this pattern is consistent with settings in which standard delegation contracts make it difficult to secure sufficient surplus relative to the value at stake and to preserve control over non-contractible margins of realization and diffusion. For Glass, these margins were especially salient and included performance and production choices (ensemble, rehearsal intensity, recording standards), the timing and scope of releases and tours, and licensing decisions across complementary uses—choices that are difficult to specify, monitor, and enforce under standard delegation contracts. Declining coordination costs, driven by smaller ensembles and by the broader availability of lower-cost recording and distribution technologies, reduced the fixed costs of organizing realization outside large intermediaries, making selective integration viable despite the presence of functioning markets.

5 Contemporary extensions

The framework developed in this paper emphasizes that organizational choice is governed by the feasibility of delegation and the ability of contracts to satisfy creators' participation constraints. Changes in technology, market structure, and contracting institutions affect organizational form insofar as they alter coordination costs, the scale of potential returns, and the enforceability of claims on realized value. From this perspective, contemporary creative markets represent a setting in which the framework's comparative statics are especially visible.

Digital distribution and streaming technologies sharply reduce the fixed costs of dissemination and coordination, lowering the cost of self-organization for many creators. At the same time, these technologies expand market reach and increase the potential scale of returns, often in highly unequal ways. Effective appropriation, however, remains constrained. Platforms typically use standardized, revenue-contingent contracts that offer creators relatively thin terms and rely on opaque accounting practices, making realized revenues difficult to verify and contest (Gillespie, 2018; Hesmondhalgh, 2019). In the language of the model, coordination costs fall and market potential rises, but creators' revenue shares are often small and claims on revenues remain hard to verify and enforce. Delegation can be widely available yet leave some creators—especially those with strong outside options or high value at stake—with incentives to selectively reintegrate realization activities such as rights management, release timing, and distribution, even as platforms continue to provide access to scale.

These patterns mirror the historical logic identified earlier in the paper. Just as composers in the late eighteenth and early nineteenth centuries retained control over performance or delayed publication when delegation could not credibly transfer sufficient surplus, contemporary creators often internalize selected realization stages while continuing to rely on intermediaries for market access. The emergence of artist-controlled labels, direct-to-consumer distribution, and selective withdrawal from platform contracts reflects not a rejection of intermediaries per se, but an equilibrium response to contracting limitations under expanded market scale.

6 Conclusion: the boundaries of the creative firm

Music history provides a transparent setting for studying how creative production is organized. Across centuries, composers confronted a recurring question central to the theory of the firm: whether to operate within hierarchical employment, delegate realization to market intermediaries, or internalize key stages of realization themselves. This paper develops a framework in which organizational form emerges from the feasibility of delegation under imperfect contracting. Creators balance the coordination costs of internal organization against the ability of employment or market contracts to transfer surplus and satisfy participation constraints. Changes in copyright enforcement, intermediation, technology, and market scale therefore reshape not only who realizes creative work, but also how and when realization is delegated.

Applied to Western classical music, the framework clarifies the long-run evolution of musical organization. Under court and church patronage, stable salaries and high independent coordination costs sustained hierarchical employment. As patronage waned and public concert markets expanded under weak copyright protection, expected returns rose faster than contractually feasible payments. In this environment, delegation often failed to satisfy participation constraints, leading composers such as Mozart and Beethoven to internalize performance and delay publication in order to appropriate value that arm's-length contracts could not reliably deliver. With the strengthening of copyright enforcement and the rise of professional publishers, orchestras, and concert organizations in the nineteenth century, a larger share of realized value could be captured and transferred to composers, making delegation more likely to satisfy outside options. Subsequent technological changes again altered these trade-offs: recording and broadcasting raised scale and coordination costs, reinforcing intermediation, while later digital technologies reduced coordination costs and enabled selective reintegration by high-value creators.

A central contribution of the framework is to show that imperfect contracting shapes not only whether realization is delegated, but also when and along which margins delegation occurs. When early delegation would accelerate diffusion or erode locally appropriable rents that contracts cannot protect, creators retain control over initial realization—through performance preceding publication, staged dissemination across locations, or selective delegation of realization activities—and delegate only after early rents have been realized. These mechanisms explain both dominant historical patterns and persistent boundary cases within periods. Although developed in a historical setting, the logic extends well beyond music. Similar trade-offs structure creative industries ranging from publishing and film to recorded music and digital content creation, where creators continue to balance coordination costs, enforceability, and market scale in organizing realization. The economic logic that guided

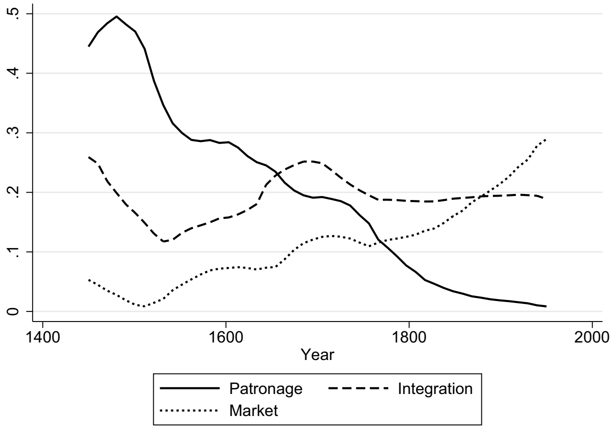

Fig. 1. Long-run trends in composers' organizational forms. The figure is constructed from biographical information in Grove Music Online using composers' geographic relocations. Measures are averaged by quarter-century and smoothed tohighlight long-run patterns. The series do not sum to one because some observations involve overlapping classifications,while others reflect organizational arrangements that fall outside the categories considered or are unobserved

composers from Buxtehude to Bruckner thus remains central to understanding how creative production is organized today.

Appendix

Illustrative evidence on composers' organizational forms

Figure 1 shows long-run patterns in composers' organizational arrangements, drawing on biographical information from *Grove Music Online*, a leading encyclopedia of music and musicians. The figure is meant to be a compact, descriptive counterpart to the historical narrative in the main text. It is not intended to provide precise measurement or formal empirical tests.

The series are constructed from information on composers' geographic relocations. Biographical entries often describe changes in employment status, affiliations, and realization arrangements at moments of relocation, making these episodes convenient windows in which organizational choices are relatively visible. This observation window introduces selection bias: relocations are not random, and some organizational changes occur without geographic movement. For that reason, the measures should be read as descriptive indicators rather than comprehensive shares.

Each relocation episode is coded into broad categories corresponding to the model's organizational forms:

> *Patronage* (i.e., hierarchical employment) is coded when biographies describe court, royal, church, or comparable salaried appointments in which realization is organized by the employer.

Integration (i.e., self-organization) is coded when biographies describe the composer as directly organizing key realization activities—for example, mounting concerts, managing an ensemble, directing premieres, running a theater or series, or otherwise taking responsibility for coordinating realization.
Market (i.e., delegation) is coded when biographies describe reliance on specialized intermediaries—such as publishers, impresarios, theaters, orchestras, or concert organizations—to organize realization through contractual arrangements.Because historical arrangements were often mixed (for example, delegating publication while retaining control over performance timing), episodes can receive overlapping codes. Accordingly, the series are best interpreted as indicators of the relative prevalence of these arrangements over time, not as mutually exclusive probabilities that sum to one. To emphasize long-run patterns rather than short-term variation, we average measures by quarter-century and smooth using local polynomial regression.

The figure shows a long-run decline in hierarchical employment, an expansion in market delegation, and episodic increases in self-organization. These patterns align with the historical discussion in the main text: as market opportunities expanded and specialized intermediaries developed, composers increasingly relied on delegation, while self-organization remained an important response in periods or settings where delegation did not offer sufficiently attractive terms or control over early realization. We include the figure solely as descriptive context and interpret it cautiously.

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