

Creative Structuration as Recursive Generative Constraint

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Introduction

For hundreds of years classical music was an occidental mainstay. Composers like Mozart, Puccini, and Vaughn Williams were culturally aligned, public elites. Yet the classical composer of today, typified by those like John Cage and Krzysztof Penderecki, have substantivized into cultural esoterics: icons oriented towards the artistic elite (Kramer, 1988; Taruskin, 2005). Although, changes like these take generations to solidify, this specific turn seems to have inflected more recently. Taruskin (2009) advanced that the 1975 death of Dmitri Shostakovich, the sardonic musical critic of Stalin, was part of a larger decline of the culturally situated, public narrating, classical composer. With the many great cultural moments and social achievements of classical music over the last 400 years, one must ask why have composers increasingly turned to art forms illegible to the broader public?

To answer this question, I offer a theory of creativity as a recursive social process. I build upon the works of Simmel (1997) Giddens (1984), Becker (1982), Abbott (1981, 2016), and Bourdieu (1993), by situating creativity as a broader analytic category that describes a method of novel differentiation built upon social interaction. This interaction may generate new institutions that are recursively replicated over time. But there are cumulative effects to creative action which existing theoretical work does not address. As creativity generates new structures, it paradoxically narrows the future domain of creative possibilities, increasing novelty's reliance upon nuance. Finally, narrowing within the institutional structure will continue until actors exit for more expansive fields.

This process, *Creative Structuration*, is not limited to artistic enterprises, but to tends be seen across genres. In consequence I advance five central elements, which are portable across institutional types: 1) Exhaustion and Differentiation, 2) Stratification, 3) Residual Creativity and Offloading, 4) Process Exit and Reiteration, and 5) Consumptive Interpretation. Although introduced in a linear sequence for analytic convenience, these elements are ongoing and iterative, rather than discrete sequential stages. These elements rest upon a set of theoretic definitions and assumptions that I first offer.

Definitions and Assumptions

Create is to order relatively unordered elements into new arrangements. By elements I mean ideas, objects, syntax, or any other physical or non-physical materials.

Creativity is not a thing, a force possessed by actors. It is an analytic categorization applied to types of execution, whose significance emerges through social evaluation.

Creative action is the event when the novel concept is chosen. *Creative action* translates possibility into commitment.

Creative freedom is the field of potential arrangements or organizations given existing constraints and objectives. *Creative freedom* of a given field ceases to exist upon commitment. It performs as a link between event “nodes,” reappearing prior to the next creative commitment in narrowed form.

Artifact is the conceptual product of the creative action or event. It constitutes the stabilization or organization of ideas, not materials. Artifacts are institutional structures.

Relics are singular encoded physical vessels of the artifact, such as the Taj Mahal or the Mona Lisa. Unlike artifacts, their durability depends upon maintenance, not replication. Not all artifacts have relics, but all relics descend from artifacts.

Reproduction is required for institutional durability. It is the reconstitution of artifacts and sometimes relics.

Elements

Exhaustion and differentiation. I approach creative commitments as nested sets. Creative commitment defines a subset of possibilities. Consequently, creative choice forecloses upon previously available path dependent options, thereby narrowing creative fields. As creativity expands the repertoire of institutional thinking and action, it paradoxically self-limits its own continued use.

Stratification. The solidification and durability of institutional structures requires reproduction. Conceptual reproduction induces a tri-schema of institutional roles. *Creativists* innovate within pre-existing structures to generate novel concepts. Once established, reproduction of chosen pathways shifts to *interpretists*, who direct reproduction given the larger ecology and the intent of the activist. *Protocolists* reproduce the institution under the terms of creativities, interpretists, and environmental constraints.

Internal offloading of residual creativity. Once creative acts are institutionalized and roles stratified, creativity offloads to other system levels. This migration of creativity arises from the structural constraints of the role. Here interpretists employ bounded creativity when combining creative intent with exogenous constraints to reproduce creative actions. Here, how one interprets offers individual input and greater professional differentiation. Reproducers use creativity to improve reproductive efficiency. Thus, while creativists may look for means to remain innovatively unbounded, protocolists creatively seek the most efficient ways to not be creative. Yet, innovative efficiency can lead to their own new institutional logics—Henry Ford’s assembly line for cars and Steve Job’s iPhone as an interface of technological consolidation offer examples.

Process exit and reiteration. Once solidified, the sequential production of creative artifacts progressively narrows the field of creative combinations that are consequential. At this point, creativity confronts a structural limit: actors may continue to differentiate within a saturated domain through ever-more nuance, find ways to reassess or reinterpret past creative decisions, or they may exit and reconstitute creative possibility elsewhere.

Consumptive interpretation. Consumers of creativity interact with relics and artifacts, not action. Artifacts and relics possess a communicative indeterminacy concerning authorial intent. Consumers are presented with interpretive choices as individuals consider the meaning of artifacts and relics. Yet, personal interpretations are not static but change with context. Interpretive consumption, therefore, expands the possibilities of singular artifacts and relics.

Two Case Studies

Post-World War 2 Computer Graphic Programming.

A generation of engineers, applied mathematicians, and systems designers entered the defense workforce in the 1960s and 1970s and enjoyed large creative latitude within stable corporate structured environments (Campbell-Kelly, 2002; Edwards, 1996). Those who worked on satellites and missiles specialized in mathematical approaches to projectiles. As industry attention turned to graphical visualizations of projectiles, amplified under Reagan’s 1980s Strategic Defense Initiative, the need emerged to integrate mathematical frameworks into a computer-generated visual approach. This in turn led many of these engineers into a field of creative and theoretical computer programming (Hiltzik, 1999).

Over time these programmers invented more sophisticated systems of graphic interfaces using compressed image and video files. With this foundation in place by the mid-1980s, the creative focus turned to creating more publicly accessible technologies like the Amiga computer which increased accessibility and scale by producing hardware and software that allowed small-business and home use at a fraction of the cost. By the 1990s—with the expansion of the internet and the foundations of graphic interfaces now settled—attention turned to marketability and investment. Here companies emphasized applications with comparatively smaller, but more marketable, improvements (O'Mara, 2003). Consequently, theoretically minded programmers of the 1960s to 1980s segregated to academia while for-profit industry focused on programmers who could create products that would increase market share. In sum, this trajectory illustrates how early generative expansion gave way to increased structural density, stratified labor roles, and the offloading of creativity toward efficiency and market differentiation.

The Second Great Awakening to Home Religious Study

Research advances the Second Great Awakening as a response not only to the over-rationalism of the Enlightenment, but also the institutional sedimentation of eighteenth-century American religions (Walters, 1976). Both Congregationalism and Presbyterianism were viewed as elite, overly philosophical, and dismissive to individual mystical religious experience. The Second Great Awakening provided the rank and file an exit from these institutional constraints. Preachers such as Barton Stone, James McGready, and Charles Finney aimed to revive a more emotionally laden, individualistic religious experience. In post-revolutionary America, the generative possibilities were expansive, as seen in the new restorationist and millenarian movements that arose out of this period.

One such movement, the Mormons (founded by Joseph Smith) radically expanded upon current Protestant Christian thought by instituting divine revelation, new religious rituals, ideas of eternal progression and man's God-like potential, with the emphasis on personal interface and communication with God (Bushman, 2005). After Smith's death in 1844, Brigham Young became the next in a succession of prophet-leaders. Each leader of the faith possessed the same divine-revelatory capacity of Smith but adapted institutional priorities to the current social milieu, while yet maintaining and building upon past revelatory structures.

For instance, Young's leadership concerned both polygamy and survival in the western frontier, while Heber J. Grant (1918 -1945) focused on alcohol and tobacco consumption and institutional legitimacy in non-Mormon circles. Later, Gordon B. Hinckley (1995 – 2008)

focused on the Church's global growth through media, financial holdings, and temple expansion, during an age of the internet while Russell M. Nelson (2018 to 2025) emphasized home-centered, Church-supported religious practice by reduced Sunday meeting time from three hours to two and built on Hinckley's vision and financial acuity by accelerated temple construction worldwide. Thus, what began as an expansive terrain of doctrinal experimentation in early nineteenth-century religious America has matured into durable organizational forms, where innovation increasingly operates through institutional recalibration rather than cosmological expansion.

Summary

In sum, *creativity* is a paradox. It performs as a tool for problem solving and differentiation by expanding pre-existing structures, but in so doing becomes its own engine of limitation. Endogenous constraint behaves in almost mathematical terms: what appears to be a limitless number of possibilities inherently narrows as the individual makes successive creative commitments. On the other hand, exogenous factors—whether venture capitalism for computer programmers or cigarette proliferation in Utah—insert new material into institutional systems that in turn offer catalysts for recalibration.

Systems containing mechanisms for adaptation likely have longer lives. For instance, Mormonism's emphasis on "continuing revelation" or the Los Angeles Opera's production of Wagner's Ring Cycle under a George Lucas-styled Star Wars set offer examples of recalibration of accumulated institutional constraints. Without recalibration, the only differentiating choice may eventually become process exit. Such a move may describe new formal approaches, like serialism and minimalism, of 20th century classical music. Of course, both adaptation and reconfiguration bring their own risks and rewards, but each underscores the inherently recursive nature of creativity in social systems.

Creative Structuration, therefore, provides a portable account of institutional maturation that bridges micro creative action and macro structural transformation across domains. In so doing it offers a framework to consider recursive production of generative systems, the stratification of creative labor, the expansion of creativity under interpretive consumption, and finally the conditions under which recalibration or process exit reorganize institutional life.

References

- Abbott, A. (1981). *Status and status strain in the professions*. American Journal of Sociology, 86(4), 819–835.
- Abbott, A. (2016). *Processual sociology*. University of Chicago Press.
- Becker, H. S. (1982). *Art worlds*. University of California Press.
(Use 2008 edition if you prefer: Becker, H. S. (2008). *Art worlds* (25th anniversary ed.). University of California Press.)
- Bourdieu, P. (1993). *The field of cultural production: Essays on art and literature*. Columbia University Press.
- Bushman, R. L. (2005). *Joseph Smith: Rough Stone Rolling*. Alfred A. Knopf.
- Campbell-Kelly, M. (2002). *From airline reservations to Sonic the Hedgehog: A history of the software industry*. MIT Press.
- Edwards, P. N. (1996). *The closed world: Computers and the politics of discourse in Cold War America*. MIT Press.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. University of California Press.
- Hiltzik, M. (1999). *Dealers of lightning: Xerox PARC and the dawn of the computer age*. HarperBusiness.
- Kramer, J. (1988). *The Time of Music: New Meanings, New Temporalities, New Listening Strategies*. Schirmer Books.
- O'Mara, M. (2003). *The code: Silicon Valley and the remaking of America*. Penguin Press.
- Simmel, G. (1997). *The concept and tragedy of culture*. In D. Frisby & M. Featherstone (Eds.), *Simmel on culture: Selected writings* (pp. 55–75). Sage. (Original work published 1911)
- Taruskin, R. (2005). *The Oxford History of Western Music, Volume 5: The Late Twentieth Century*. Oxford University Press.
- Taruskin, Richard. 2009. *"The Danger of Music: A Musician's Reflections on the Twentieth Century."* Berkeley: University of California Press.
- Walters, R. (1976). *The Second Great Awakening: Church and society in early nineteenth-century America*. Macmillan.