**Full Paper Lucie Marinier**

**TITLE:** The "Culture and Creation in Transitions" study. Ecology, digital, participation, cultural venues evolutions: Professions, organizations, and skills are changing : What initial education and professional training needs?

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**ABSTRACT:**

The paper presents the study "Culture and Creation in Transitions", conducted within the framework of the French government's Future Investment Plan on "Skills and Future Professions" in 2023. The project brought together a unique consortium of academics and professional cultural organizations. The study looked into the professions of museums, visual arts, design, arts and crafts, digital visual arts, and territorial cultural engineering and policies. It investigates their evolution in response to ecological transitions, digital transformations, the emergence of cultural rights, and the evolution of cultural venues and spaces (increasing of online culture, projects in public space, new missions for institutions, third places). It aims to highlight the resulting skill and training needs and leads to a comprehensive set of recommendations for initial education et executive/professional training.

**Keywords:** Culture, Ecology, Digital, Professions, Training

**COMMUNICATION TEXT:**


**Introduction :**

The study "Culture and Creation in Transitions"[1] was conducted by HESAM University, CNAM, University Paris 1 Panthéon-Sorbonne, the fashion, arts and craft, and design Campus, and several cultural and professional training operators.

It is part of the fourth Future Investment Plan led by the French government and its call for projects "Skills and Future Professions - Diagnostic Component".

I had the honor of coordinating it.

The study focuses on **France's museum, visual arts (both plastic and digital creation), applied arts (design and crafts), and cultural engineering sectors, particularly related to territorial and urban planning issues.**

**I/ Study Framework, Sectors, and Studied Transformations**

Three motivations guided the choice to investigate **these sectors in particular**. First, these ecosystems are linked to **exhibition professions** and those of plastic and visual creation. Second, **they increasingly interact** (artists, designers, museographers, craftspeople, urban cultural project managers, etc.) with common economic and skill issues. Finally, they are **traditionally less studied** than the performing arts or Creative and Cultural Industries in economic, employment, and training terms, partly because they are not organized into professional branches (in France, a professional branches group companies in the same activity sector with signed collective agreements between employee and employer unions) but also because their organizations and professionals regroup number of different statuses (public structures, private foundations, non-profit associations, independent workers, etc.).

The study hypothesized that one consequence of this lesser study was that **their specific initial and professional training needs were also less highlighted**.

Our study particularly observes four transformations:

- **Ecological Issues :**
  - Emergence and development of artistic content related to ecological issues
  - Eco-responsibility for producing and disseminating or broadcasting works of art and exhibitions
  - Role of the cultural sector in raising awareness of ecological issues in society.
- **New Digital Transformations impacting and inluencing :**
  - Creation with digital means
  - Dissemination and broadcasting on line
  - Digital mediation to the public and cultural practices.
- **New Issues Related to Diversity, Cultural Rights, and Public Participation**
- **Transformations of Cultural spaces and venues :**
  - Development of projects in public spaces, outdoor rather than just indoor
  - New missions and activities of cultural institutions: living spaces, conviviality, food, education, commerce, etc.
  - Development of cultural projects in third places and especially artistic third places

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[1] https://cultureetcreationenmutations.fr/le-diagnostic/

o Explosion of online cultural creation and practice and its articulation with in-person culture.

## II/ Methodology

We compiled data and official reports available on the concerned sectors (about 200). We conducted around 100 interviews and organized a study day attended by over 200 people. A mapping of initial cultural engineering training (carried out by University Paris 1 Panthéon-Sorbonne) was produced, as well as a survey through professional networks. Finally, we studied and described with mini-monographs about fifty projects, structures, or training programs characteristic of the studied transformations.

We took the **unusual approach of observing the professions, skills, and initial and continuing training of cultural engineers** (directors, producers, technicians, administrators, audience or development managers, state and local civil servants in charge of cultural affairs, consultants, etc.) **alongside those of artists** (especially plastic artists) **and creators** (design and crafts) **and curators**. We also paid particular attention to the directors of visual arts venues like art centers, who must combine artistic and engineering skills. We wanted to verify or refute **the hypothesis that the studied transformations particularly modify this articulation between creation and engineering** (production, administration, management, mediation).
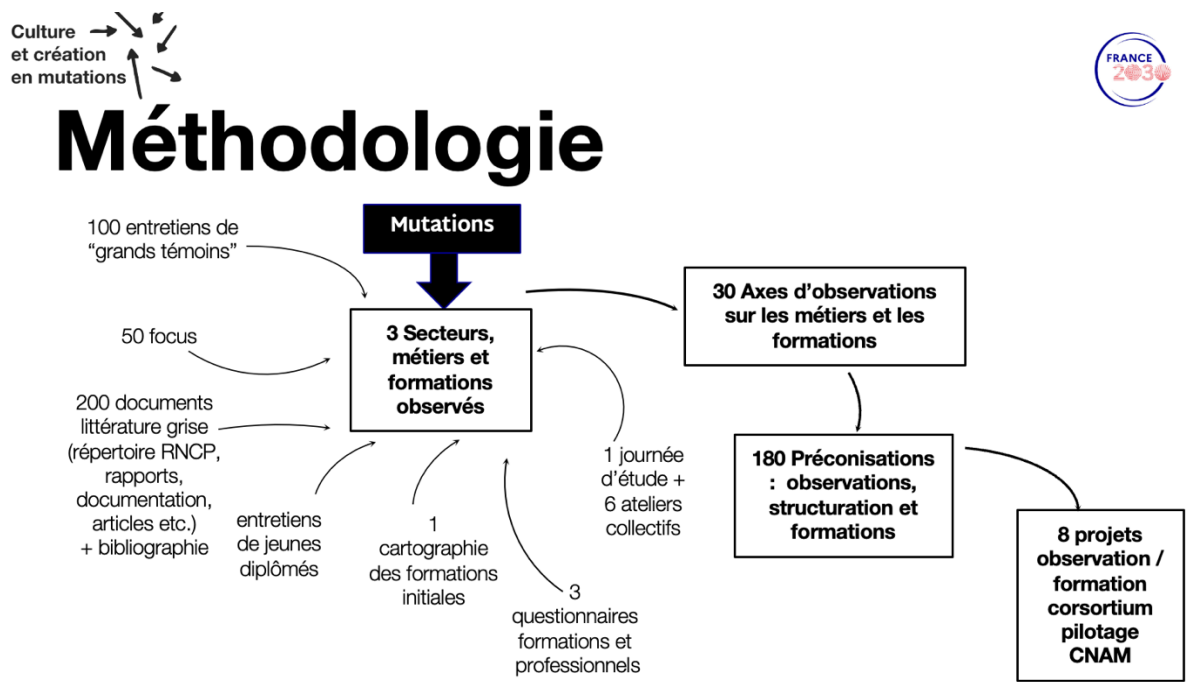


## III/ Study Results

The initial hypothesis, confirmed throughout the study, was that these transformations change organizations, professions, skills, and the socio-economic position of actors.

1. **Under-Observed and Monitored Sectors:**

Visual arts, museums, and applied arts sectors are poorly structured and observed in terms of workforce, professions, and skills: the absence of professional branches and thus lead OPCOs[2], and the coexistence between independent, public, nonprofit, or private statuses are the main reasons. We also noted a lack of observation frameworks at the local and national level by public services (for instance about museum professions expect for curating).

### 2. Training Needs and Priorities:

**The sectors' training needs and priorities are insufficiently formalized**, given the mutations affecting them, which hampers their necessary transformation. Even though they may not all recognize themselves under common terms like exhibition, art, or creative and cultural industries sectors, the professionals we interviewed more or less mentioned the same evolutions in their ecosystems and the same skill needs. A **better together organization** for these sectors, for more visibility and more consideration of training needs is an unanimous request.

### 3. Generalized Hybridization:

These paradigm shifts **transform modes of creation, production, and appropriation of culture, art, and heritage**. The content and formats of works, types and missions of cultural venues, and cultural practices evolve, diversify, and **hybridize:** projects mixing design and visual arts, artists who are also producers or teachers, projects combining arts and life sciences, public cultural venues hosting design or urbanism projects...

There is also a **shift about boundaries between domains of the "unique" work** (contemporary art, museums) **and those of creative and cultural industries** (like video or digital creation) or **between heritage and museum works and "useful" creation** (design, scenography, crafts).

**Projects should no longer, it seems, be built linearly**. Today, according to the actors themselves, it is **necessary to move beyond the traditional binary model of cultural organization, creation on one hand and dissemination on the other hand.** In the old model, particularly in France (but not only (Becker et al., 2010), (Jeanpierre & Roueff, 2014)), the artist, or curator, or director, or programmer creates artworks, conceive projects, program exhibitions, acquire works first (in time but also in terms of the hierarchy of values). Then, only in a second step, come all other actors, from production, management, technical, communication, territorial development, innovation, and mediation. These people are "cultural engineers" tasked with producing, implementing, and transmitting to the public what was imagined beforehand, without necessarily involving their professional skills earlier.

There is also an evolution in the position of cultural professionals regarding organizations and institutions with **three phenomena**:

- **Increasing and more formally assumed multi-activity,** for economic reasons but also by choice, notably artists who are also producers, teachers, designers (Bureau, Perrenoud, Shapiro, 2023);

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[2] In France, the Opérateurs de compétences OPCO's (skills Operators) missions are to finance learning, to help professional branches (which are by sector e.g. industry, leisure... social dialogue entities) to build professional certifications in particular by means of studies and observation and to support companies to define their training needs. However, the professions that we are studying do not have a single OPCO since none constitutes a professional branch (unlike live performance or cinema for example).

- **More and more independent workers** around institutions[3];
- Development of **new professions** related to cultural urbanism, immersive exhibitions, making skills (Berrebi-Hoffmann et al., 2018), third places, or sustainability issues.

Visual art and even more applied arts (arts and crafts and design) **initial higher education have never been so attractive.** We can observe new collaborations developed between artists, curators, designers, cultural engineers, producers, etc.

There is also **increasing porosity, interdisciplinarity, and hybridity in projects and teams**. The role of consultants and freelance providers (digital consultants, mediators, scenographers, some of them who are also artists…) is growing, as is that of artist collectives, private structures, and new relationships with institutions. Hence **the need for cultural engineers to master artistic issues and creators to master engineering methods.**

**Professionals are willing and sometimes driving forces to help their professions and sector evolve in the face of ecological and digital transitions,** or to integrate cultural rights from a broadly shared general interest perspective. However, **initiatives - individual and collective - still too often lack an overall multidisciplinary, replicable, and cross-sectoral vision**.

Achieving this objective involves **new working and collaboration methods** at all levels of cultural institutions. Transitions also reinforce **numerous skill needs in management**, psychosocial risk prevention, leadership, change management, creation issues, and mastering new evaluation, measurement, or impact calculation tools, frequently expressed in interviews.

4. **Facing Transitions: Evolution of Values, Public Policies, and Organizations: Dealing with Contradictory Directives**

**The cultural sector has been particularly shaken by the covid 19 crisis**[4]. The period allowed new digital cultural offerings and practices or the strengthening of existing ones, as well as raising awareness of ecological issues. The goal of a greater diversity among audiences and professionals is also becoming increasingly present. However, **the debate on whether art and culture are "essential"[5] or not** has left lasting effects in museums, art centers, and local authorities in charge of cultural policies. **Many positions remain vacant**, especially in support functions. The crisis may have contributed to **undermining the "vocational" model** of cultural professions (Dubois, 2013).

**Cultural policies, especially at the territorial level, are apparently undergoing significant shifts**. In many interviews, the end of consensus, in many cities, on the relevance of a cultural policy and support for creation both autonomous and structuring (Dubois et al., 2012) has been mentioned.

The emergence of **new concepts, news missions and new values** (especially for museums) seems central in the face of evolving, but still **contradictory, directives**:

- creating, producing, and disseminating more while reducing costs and ecological impacts;
- developing digital and innovative projects while ensuring the public returns to venues;

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[3] « Eclairage - Le nombre de non-salariés dans les activités culturelles a presque doublé entre 2007 et 2016" PP 91-102 Insee - Emploi et revenu des indépendants, édition 2020

[4] Les répercussions du covid sur le secteur des arts visuels, enquête du CIPAC, 2020
https://www.aneat.fr/media/pages/ressources/covid19/enquete-et-rapports/2587113564-1615372520/conclusion-enquete-cipac-2020.04.23.pdf

[5] In France as in many countries, the cultural sector was marked during the different periods of confinement by the debate on its essential character or not justifying sometimes the opening and sometimes the closure of cultural places

- ensuring artistic and curatorial freedom while introducing public participation and participation inside creation projects and programming;
- developing international creation but local facilities, etc.

**Public policies are increasingly evolving towards project calls** (instead of regular subsidies), allowing new initiatives to emerge but also creating significant uncertainty about the sustainability of projects and the modalities of support for creation and dissemination. This also requires new skills from actors, which are not always compatible with the frequently observed situations of economic and **institutional insecurity for people, projects and organizations**.

5. **Evolution of Training Needs: Topics and Methods**

a. The most frequently expressed needs during the study, in order of importance, are:

- **Ecology:** management of an eco-responsible strategy, legal and technical issues, eco art, new way of exhibit, public awareness, measurement and evaluation tools etc.

- **Management, human resources, psychosocial risks, change management.**

- **digital:** techniques, legal issues, new aesthetics.

- **Institutions and cultural venues and their evolutions:** third places, public space, cultural urbanism, territorial cultural engineering.

- **Care, artistic freedom, and cultural rights, diversity issues.**

- **Cultural and creative entrepreneurship, economic models of activities.**

- **Copyright, administrative management of artistic and creative production.**

- **Technical and building issues.**

- **And also, though to a lesser extent:** international openness, discoverability of contents, cooperation between art and research.

b. Main conclusions of the analysis we conducted about initial higher education and executive education of professional training :

**Ecological, digital, and cultural rights topics have appeared in most training programs**, whether in engineering or artistic and creative training. **However, these are often still short awareness courses** rather than theoretical and operational training for new skills. It's difficult to integrate these issues and it takes time because of, among other problems, rigidity of pedagogical frameworks, difficulties in engaging professional interveners, lack of teachers training.

Regarding **professional training,** we are facing an **underuse** of training in all the sectors studied, particularly for museum professionals and artists, despite the establishment of the artists-authors' fund[6]. Among the requests we already mentioned ecological transitions and new contracts modalities for artists and designers , who increasingly find themselves in entrepreneurial situations and need therefore to train on legal issues. However, if proposals are developing, they remain insufficient. Similarly, digital transformations: content discoverability of content, or archiving and copyright. This is even more the

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[6] This fund was created ten years ago and is organized by AFDAS, the main OPCO of cultural sector. The fund benefits from 10 millions euros per year.

case for ecological creation and eco-production issues. Training needs, both initial and post-diploma or mid-career, are more visible and important, and training programs (as well as trainers) are lacking.

**Initital education methods are evolving** without always needed resources. In initial education, project-based pedagogies, mobilization of humanities and social sciences skills, and co-design, storytelling, and inquiry methodologies are growing. Teachers and trainers claim the rising role of learners/students in knowledge production. The increasingly valued role of artistic and cultural content as facilitation tools and enrichment in non-cultural curriculum training was also mentioned. Especially since it could provide diversification professional opportunities for artists.

**There is a parallel significant shift in continuing education**. OPCOs are more and more mobilized on producing transitions content. **Professional networks are becoming more and more important actors : for** debate, data exchang and norm production. In addition to traditional organizations (for instance International council for museums, or CIPAC the professional organization for visual arts we both studied) new thematic groups emerge (Arviva for ecology and performing arts, Tmnlab for digital and culture, Bla! for contemporary art mediation). **Many of them are involved in training**, without always being officially recognized as actors in this skill-building process. "Situated" training (in cultural structures) is developing, although the economic models are not always in place. **The demand for team training projects,** in the form of support-training, is increasing. And, finally, self-training is taking a central place.

All these changes raise **questions about certification of training offers**. How can be sure they are convenient? However, following the **professional training reform**[7], the validation methods of traning offers by France Compétences and Qualiopi (the new training quality certification system), needed to be financed, are often not appropriate to evaluate the efficiency of training proposals for the cultural sector. Museum and visual arts represent small cohorts, professional integration with low salaried employment figures and a bad study level versus professional income ratio.

Finally we can mention that **scientific research in the cultural and artistic sector and research through creation** are booming and provides opportunities (partnerships with the scientific world, broadening perspectives), even if controversies emerge about research-creation methods (Talon-Hugon, 2021). Moreover, the transitions and mutations topics addressed in the study were mentioned by many interviewees as needing more applied research (PHD's contracts in cultural organizations).

## IV/ Cross-Cutting Recommendations

The report includes over 180 proposals; here are the most important ones:

- **Promote Professional Sector organization and visibility :**
    - Identify and assign a lead OPCO for these professions ;
    - Launch or generalize/renew sectoral studies on museums, exhibition professions, mediation, crafts, design, territorial cultural engineering (DAC, cultural urban planners), technical professions, managers;
    - Establish an updated job reference framework by sector;
    - Organization of professional branches for museums, visual arts, and exhibition sectors.
- **Initial Training:**

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[7] Since January 1, 2022, all training providers (who wish to access public funds must be Qualiopi certified, a quality label, including large public operators such as universities. The creation of France competency involved a validation mechanism for particularly demanding professional training courses (allowing a professional diploma)

- Train teachers on digital, ecological transitions, cultural rights, legal-administrative issues concerning artists, cultural entrepreneurship, research initiation in artistic and creation training as well as engineering;
- Hire more professionals in higher education
- Ensure more diversity of teachings and recruitments in applying for art and crafts public schools
- Increase support of research projects related to creation and cultural engineering;
- Develop common training for students in engineering, art, or heritage;
- Create technical training in the museum and visual arts sectors;
- Create a continuing education righ after graduation for artists, particularly on entrepreneurship and law issues;
- Develop diplomas on exhibition professions, public art, ecological issues of museums and visual arts.

- **Continuing Education:**
  - Train directors or leadership duos of cultural institutions on transition issues
  - Build common training for city civil servant in charge of art affairs and their deputy mayors about new cultural policy issues
  - Develop "Advisory Support" for structures and professional about ecological transition. Add themes of cultural rights and digital transitions
  - Make training funding, to institutions, companies, and their employees more visible
  - Inform all artist-authors about their right to training
  - List on each territory the companies and institutions already structured on these aspects, which can serve as network heads for training
  - Promote the validation of experience (VAE) and higher education validations (VES) especially between creation training and engineering training
  - Allocate part of grants, subsidies and budgets (artistic commissions, production aids, calls for projects, residencies) to training and building legal and economic models of supported projects
  - Develop co-certifications with various organizations (higher education, professional training and cultural venues)
  - Promote partnerships between national training or higher education structures, professional networks, expert networks, or cultural structures developing training projects
  - develop very short online formats (MOOC, on line distance training synchronous or not) with micro-certifications

## V/ Conclusion

The study "Culture and Creation in Transition" verified several hypotheses regarding the evolution of professions and organizations in museum, visual, applied arts, and cultural engineering professions. Let's quote, the lack of organization and data on these professions, the increasing hybridization of professions, statuses, and projects, the development of contradictory public injunctions, and the evolution of public policies.

The study team, by its diversity, allowed the confrontation of university research methodology and professional applied study. This leads to a series of recommendations on which consortium members

rely, still within the framework of France 2030 and the call for project "Skills and Future Professions" to propose several training projects. For instance, the issue of leaders training about change management and artists training and creators and their teachers about economic position and law issues are priorities. The extremely short timeframe given to complete and submit the project (9 months) created great frustration, and some observations could not be deepened. Therefore, consortium members plan to continue this work on specific professions: technical directors, curators, designer authors.

It could also bien interesting to extend this study to other European countries in the future.

## VI/ Bibliography:

Anselme, L., Coler, P., Fourreau, É., & Richard, M. (2022). *Droits culturels. Les comprendre, les mettre en œuvre*. Éditions de l'Attribut; Cairn.info. https://www.cairn.info/droits-culturels--9782916002798.htm

Ardenne, P. (2009). *Un art contextuel : Création artistique en milieu urbain, en situation, d'intervention, de participation*. Flammarion.

Ardenne, P. (2019). *Un art écologique : Création plasticienne et anthropocène* (Éd. revue et augmentée). le Bord de l'eau.

Becker, H. S., Menger, P.-M., & Bouniort, J. (2010). *Les mondes de l'art*. Flammarion.

Berrebi-Hoffmann, I., Bureau, M.-C., & Lallement, M. (2018). *Makers : Enquête sur les laboratoires du changement social*. Éditions du Seuil.

Bessy, C., & Chauvin, P.-M. (2010). Pierre-Michel Menger, Le travail créateur. S'accomplir dans l'incertain, 2009, Gallimard-Seuil, Paris, coll. « Hautes Études », 667 p. *Revue Française de Socio-Économie*, *6*(2), 167-174. Cairn.info. https://doi.org/10.3917/rfse.006.0167

Bureau, M.-C., Perrenoud, M., & Shapiro, R. (Éds.). (2009). *L'artiste pluriel : Démultiplier l'activité pour vivre son art*. Presses universitaires du Septentrion.

CIPAC. (2020). *LES RÉPERCUSSIONS DU COVID-19 SUR LE SECTEUR DES ARTS VISUELS*. https://www.aneat.fr/media/pages/ressources/covid19/enquete-et-rapports/2587113564-1615372520/conclusion-enquete-cipac-2020.04.23.pdf

Demazière, D., Gadea, C., & Arborio, A.-M. (Éds.). (2009). *Sociologie des groupes professionnels : Acquis récents et nouveaux défis*. Découverte.

Dewey, J., Shusterman, R., Buettner, S., & Cometti, J.-P. (2010). *L'art comme expérience*. Gallimard.

Direction générale de la création artistique & Service de l'inspection de la création artistique. (2019). *Etude sur la pédagogie, la recherche et le développement à l'international dans les écoles supérieures d'art*. https://www.culture.gouv.fr/Espace-documentation/Rapports/Etude-sur-la-pedagogie-la-recherche-et-le-developpement-a-l-international-dans-les-ecoles-superieures-d-art

Doyen, A., & Mairesse, F. (2022). *Les formations muséales à travers le monde*. https://ocim.fr/2022/03/les-formations-museales-a-travers-le-monde/

Dubois, V. (2013). *La culture comme vocation*. Raisons d'agir.

Dubois, V., Bastien, C., Freyermuth, A., & Matz, K. (2012). *Le politique, l'artiste et le gestionnaire : (Re)configurations locales et (dé)politisation de la culture*. Éditions du Croquant.

Dutheil, C., Ribac, F., & Delcambre, P. (2017). *La fabrique de la programmation culturelle*. La Dispute.

Gob, A., & Drouguet, N. (2021). *La muséologie. Histoire, développements, enjeux actuels: Vol. 5e éd.* Armand Colin; Cairn.info. https://www.cairn.info/la-museologie--9782200630997.htm

*Hermès 72—L'artiste, un chercheur pas comme les autres—L'artiste, un chercheur pas comme les autres—CNRS Editions*. (s. d.). https://www.cnrseditions.fr/catalogue/revues/hermes-72-lartiste-un-chercheur-pas-comme-les-autres/

Insee références. (2020). *« Eclairage—Le nombre de non-salariés dans les activités culturelles a presque doublé entre 2007 et 2016 » PP 91-102 Insee—Emploi et revenu des indépendants, édition 2020*. https://www.insee.fr/fr/statistiques/4470890

Jeanpierre, L., & Roueff, O. (Éds.). (2014). *La culture et ses intermédiaires : Dans les arts, le numérique et les industries créatives*. Éditions des archives contemporaines.

Marinier, L. (2023). Pour une écosophie des oeuvres publiques. *Culture et recherche*, *145*.

Marinier, L., Vassal, H., Porcedda, A., & Armand d'Hérouville, L. (2023). Former les personnels des musées aux enjeux des transitions socio-écologiques. *La Lettre de l'OCIM*, *207*, 68-81.

Menger, P.-M. (2002). *Portrait de l'artiste en travailleur : Métamorphoses du capitalisme*. Seuil.

Mollard, C. (2020). *L'ingénierie culturelle: Vol. 6e éd.* Presses Universitaires de France; Cairn.info. https://www.cairn.info/l-iingenierie-culturelle--9782715402850.htm

Oldenburg, R. (1999). *The Great Good Place. Cafés, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community*.

Patureau, F., & Sinigaglia, J. (2020). *Artistes plasticiens—De l'école au marché*. Ministère de la culture, Secrétariat général, Département des études, de la prospective et des statistiques (DEPS) : Sciences Po, Les presses.

Pinard, J. (s. d.). *L'urbanisme transitoire, entre renouvellement des modalités de fabrique de la ville et évolution de ses acteurs : Une immersion ethnographique au sein de SNCF Immobilier*.

Pinard, J., & Morteau, H. (2019). Professionnels de l'occupation temporaire, nouveaux acteurs de la fabrique de la ville ? Du renouvellement des méthodes en urbanisme à l'émergence de nouveaux métiers. *Riurba*, *8*. http://www.riurba.review/Revue/professionnels-de-loccupation-temporaire-nouveaux-acteurs-de-la-fabrique-de-la-ville-du-renouvellement-des-methodes-en-urbanisme-a-lemergence-de-nouveaux-metiers/

*Politiques culturelles territoriales : Coopération et droits culturels, transitions écologique et sociétale, éducation et formation*. (2023). Editions de l'Attribut.

Sapiro, G. (Éd.). (2007). *Vocations artistiques*. Seuil.

Talon-Hugon, C. (2021). *L'artiste en habits de chercheur* (1re édition). Puf.

Winkin, Y., & Doueihi, M. (2020). *Réinventer les musées?* MkF éditions.

Zask, J. (2013). *Outdoor art : La sculpture et ses lieux*. La Découverte.

Zask, J. (2018). *Quand la place devient publique*. le Bord de l'eau.