The power of objects ? Materiality and institutional work in the French recorded music industry (1994-2014)

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Abstract :

The present paper seeks to contribute to the understanding of the role played by materiality in institutional work (Lawrence and Suddaby, 2006). To do so, we consider practices as a key point to define institutions (Greenwood et al., 2008) and to understand agency (Bourdieu, 1992; 1996). Doing so, we follow Neo-Institutional Theory recent additions to the institutional work literature and take part in an emerging movement of renewed attention towards (micro-)practices and materiality (Zietsma & Lawrence, 2010; Jones & Massa, 2013; Gawker & Phillips, 2013 ; Raviola & Norbäck, 2013).

In particular, our study investigates how objects (either physical or not) play a role in institutional work through practices.

Thanks to a field case study of the French recorded music industry (1994-2014), based on observation data, secondary data and interviews gathered in four sub-cases, we deliver narratives of how objects together with actors, shape micro-practices - therefore emergent patterns of practices, and play an active role in creating, maintaining or disrupting institutionalized practices at the field level.

First, our case reveals that objects relate to other objects and material practices within what we call « objects and practices groupings », as components. A so called grouping is both a process and the result of that process. It constitute the level where institutional work is enacted. Second, our study suggests the addition of two specific kinds of component objects in the researcher toolbox to investigate materiality: bridge objects and community objects. They play different roles in institutional work. The former enables the importation of useful object resources (from another grouping). The latter seams to play a crucial role in micro-practices transformation into collective practices at the macro level. Last but not least, our study leads to a sensitive consideration of material practices. Indeed, the audio form of objects influences actors decisions and practices. Yet, these decisions and practices also depend subjectively on actors skills to learn and evaluate the given audio form.

All in all, the present paper shows how materiality (objects and practices groupings) empower actors, either classic organizations such as companies or more informal groups of actors such as consumers, shape their decisions and practices and enable them to take an active part in the institutional work. That object grouping empowerment can be described as a process of social, economic and cultural capital acquisition.

Key-words : Neo-Institutional Theory, Creative Industry, Materiality, Practices

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1. INTRODUCTION

The present paper seeks to contributes to the understanding of the role played by materiality in institutional work (Lawrence and Suddaby, 2006) and more specifically in the subset of institutional work that is aimed at creating, maintaining, or disrupting institutionalized practices. Therefore, in the present paper and following Zietsma & Lawrence (2010), we use « practice work » or « practice institutional work » to refer to it.

Indeed, if Institutional theory had paid attention to everyday practices and objects (Berger & Luckman, 1967), Neo-Institutional Theory has had a strong focus upon discourses until very recently. Considering practices as a key point to define institutions (Greenwood et al., 2008) and to understand agency (Bourdieu, 1992; 1996), we thus follow a new path in the institutional work literature (Lawrence, Leca and Zilber, 2013) and take part in an emerging movement of renewed attention towards micro-practices and materiality (Jones et Massa, 2013; Gawker and Phillips, 2013 ; Raviola et Norbäck, 2013).

In particular, our study investigates what are the qualities of the objects playing a role in institutional work, further than those already pointed by these scholars (like being particularly resilient in the case of buildings). As the literature already identified various roles played by these objects in institutional work, like being frontier entities or serving as references for shaping new practices or serving as references for shaping new identities, we pursue the listing and understanding of these various roles performed by objects. We also want to provide an understanding of processes of material practice work: how material micro-practices emerge and are finally routinized and transformed into practices at the field level.

Thanks to a field case study of the French recorded music industry (1994-2014), based on observation data, secondary data and interviews gathered inductively in four sub-cases, we

deliver descriptions of how objects shape micro-practices and therefore emergent patterns of practices, and play an active role in practice work.

First, our case reveals that objects have the characteristic of being relational entities that relate to other objects and material practices. They pertain to what we call « object and practice groupings », as components. Those groupings are both a process and the result of that process. They constitute the level where practice work is enacted. Second, our study suggests the addition of two specific kinds of component objects in the researcher conceptual toolbox to investigate materiality: bridge entities and community entities. The former allows resource objects importation from other groupings. The latter seams to play a crucial role in micro-practices transformation into field level practices. Last but not least, our study leads to a sensitive consideration of material practices. Indeed, the audio form of objects influences actors decisions and practices. Yet, these decisions and practices also depend subjectively on actors skills to learn and evaluate the given audio form.

All in all, the present paper shows how objects and practices groupings empower actors, either classic organizations such as companies or more informal groups of actors such as consumers (or more largely communities), shape their decisions and practices and enable them to take an active part in practice work. In bourdieusian terms, that empowerment could be described as a process of social, economic and cultural capital acquisition.

2. THEORETICAL BACKGROUND

Practices are a central dimension to the study of arts and creative industries (Bourdieu, 1992; 1996) and to institutionalization processes (Boxenbaum & Battilana, 2005; Lawrence et al., 2013). In the Bourdieusian perspective that flows through the arts and creative industries literature, practices connect structure and agency within fields. Social systems are produced and reproduced thanks to these practices.

2.1. NEO-INSTITUTIONAL THEORY (NIT), PRACTICES AND MATERIALITY.

Neo-institutional theory has been a major analytical framework for scholars in management and organizations for several years. Although Institutional Theory (« the old institutionalism ») was attentive to objects and practices of « everyday life » (Berger & Luckman, 1967), that concern was put backward as NIT was taking part to the « discursive turn ». Nevertheless, NIT progressively regained interest for practices in institutional entrepreneurship (see Leca, Battilana and Bauxenbaum 2008 for a review) and institutional work (Lawrence and Suddaby, 2006), and also in institutional logics (Thornton, Ocasio & Lounsbury, 2012) and institutional complexity (Greenwood et al. 2011) perspectives.

In that conception, institutions are defined as taken-for-granted and enduring sets of practices (Greenwood et al., 2008). Attention to practices is thus of major importance when studying institutions. Here, the word practices stands for *"recognized forms of activity"* (Barnes, 2001, p.19) or "shared routines of behavior" (Whittington, 2006, p. 619). That renewed attention to practices contributes in particular to the understanding of institutional change, where institutions are instantiated in practices and where individual or collective practices can also foster institutional change (Pinch 2008; Smets, Morris & Greenwood, 2012).

Attention to micro-practices is a more recent trend that appeared in the study of institutional work (Barley, 2008; Smets & Jarzabkowski, 2013; Smets Morris & Greenwood, 2012; Pache & Santos, 2013; Zietsma & Lawrence, 2010). Yet, even if the interest for practices and micro-practices is real, attention to practices remains very often set onto discursive practices rather than onto material objects (Jones, Bauxenbaum & Antony, 2013, Friedland, 2012), partly due to methodological inertia. We thus identify material (micro-)practice work as the the present paper primary interest.

2.2. A CALL FOR MATERIALITY AND RECENT CONTRIBUTIONS ON MATERIALITY AND INSTITUTIONAL WORK

The recent attention to sociomateriality as « the new black » (Jarabokowski & Pinch, 2013) may be the sign of a « material turn ». Anyway, NIT scholars have already started to integrate materiality by questioning the influence of human made objects (or artifacts) onto

institutional processes (Kaghan and Lounsbury, 2006; Lanzara and Patriotta, 2007; Scott, 2008; Lanzara, 2009).

After theoretical questioning and pointing at the need for concepts (Pinch, 2008), most recent works engaged into empirical studies, searching an articulation between institutional work and materiality. They underlined the role of material objects in the instantiation, diffusion and institutionalization of new ideas (Jones et Massa, 2013), suggested that artefact design is a form of institutional work that instantiate the institution, is shaped by and reshapes institutional logics (Gawker and Phillips, 2013) and showed how technologies enable action and even enact actors in their institutional work (Raviola et Norbäck, 2013).

That first set of literature, aiming at introducing materiality in the understanding of institutional work, needs to be extended in several directions in order to provide a more complete view of materiality and its articulation with practice work concepts. To that extent, Pinch's call for the development of a conceptual toolbox, is still on the agenda. His own research Pinch (2008) allowed him to propose: objects as « liminal entities » and actors as «border shifters ». Surely, that toolbox should be populated with more concepts and, if objects can be « liminal entities », there might also display other qualities that should be uncovered.

Jones & Massa (2013) on their behalf, invited to investigate how objects with various degrees of resilience and cultural value might take part in various institutional work processes. They start to help us understand the various role(s) that objects can play in institutional work, like serving as references for shaping new identities. Another understanding of these possible roles is provided by Raviola & Norbäck (2013): serving as references for shaping new practices. So, the question of material practice work is starting to be answered. That is calling for further investigation about these roles. Also, Raviola and Norbäck gives us an hint at where to look at to identify further roles: institutional work happens on micro-practices, in relation with tangible/physical objects - like a newspaper and non tangible/physical objects like a website. If institutional work happens at that level, they also admit that the process by which material micro-practices get transformed into practices at the field level remains unclear. If we want to investigated those processes, we also have to realize that this is the whole process that has yet

to be understood: from objects identification and selection when engaging into micro practice work, to transformation into taken for granted institutionalized practices at the field level.

2.3. RESEARCH QUESTIONS

Considering these gaps, we can say that a research development avenue exist for understanding more deeply how objects display special characteristics and play various fundamental roles in practice work and what processes are involved in material practice work.

This study thus aims to contribute to that research avenue, with the following research questions:

> *Do objects playing a role in practice work have particular characteristics?*
> *What part do these objects perform in practice work ?*
> *What processes are essential to understand material practice work?*

3. METHODOLOGY

3.1. EMPIRICAL RESEARCH CONTEXT

We have identified the field of the recorded music industry subsequently to the introduction of MP3 format (1994-2014) as adequate to investigate our research question. That is indeed an emblematic context for institutional transformation dynamics (Moyon & Lecocq, 2010) and for institutional maintenance (Blanc & Huault, 2014). Changes in the materiality of the field are such that the « disc industry », as it was called in French became the « recorded music industry ».

An interesting point is that consumers were pointed as « guilty » of disruptive social practices by the institutions defenders (calling them « pirates » and voting various anti-paricy laws such as the very known « Hadopi » law), thus orienting our research onto consumers as potential practice workers. At the beginning of the 2000s, consumers uploading and downloading practices put the major actors of the fields (namely « the Majors ») in a relative difficulty, fostering downsizing and restructuration (the « Majors » from 5, became 4, then 3). The

industry was « in crisis » until a formerly « pirate » practice associated to MP3 (streaming), became legitimized and « rescued » the industry thanks to the newly added « monetization ».

Another interesting point is that the Compact Disc (CD) itself is seen as culprit for not having resisted to the « pirate » consumers practices. That is suggesting that objects might play a role in practice work too.

Additionally, the field seems to define itself through materiality and actors spontaneously refer to various material eras in the field history: from first cylinders and phonograms to vinyls, tapes, CDs and the most recent MP3. Investigating the « MP3 era » seems of particular interest as this is the first time that the music support is dematerialized. A former professional of the field also underlines that this is the first time in the field history that a support (MP3) is of lesser technical quality than its predecessor (Vinyl).

We are closing our study in 2014 mainly for practical reasons as we don't believe that the current era is over even if the industry was claiming that it was the beginning of a new era at the international music fair in Cannes in February 2014. Indeed, we also collected sources that do not see another new era before several years and maybe a decade.

3.2. DATA COLLECTION

We have chosen an inductive case study approach in order to provide a deep understanding, to keep an exploratory posture, as well as to provide a basis for theory building. Our case study relies on three stages of data collection:

- Observation (Participatory observation - netnography (Kozinets, 2010) of several projects on a crowd funding platform and internet music label. Non participatory observation of a professional fair. Non participatory observation of a fan forum.),
- Secondary data analysis of 157 professional documents, press and web articles,
- Semi-structured interviews of 21 producers, technicians, artists, journalist, politician and consumers.

3.3. APPROACH AND METHODS OF ANALYSIS

We considered these data first all together through several steps of coding and data selection, with a Grounded Theory inspiration as a starting point (Glaser and Strauss, 1967, 1999). Memos have therefore been written and collected as data material during all stages of data collection and analysis in order to keep track of on the field interpretation and emerging patterns.

Longitudinal analysis did not provided clear sub-periods within the studied time frame. While new practices such as upload/download, streaming, use of home-studios or crowdfunding emerge in successive waves, they overlap each other. The also overlap the declining CD use and a re-emerging vinyl consumption. Our explanation, is that periods might rather be identified on a much wider time frame, where main objects and practices are easier to be identified. Another explanation is that new objects and practices on the studied period do not radically replace former ones but are added to them (with the exception maybe of the digital studio replacing the analog studio). That might have to do with the already mentioned lower technical quality of MP3.

As content analysis was allowing us to identify various objects, micro-practices, practices, actors and practice work evidences, we still needed to identify clearly the link between objects and practices (that link was lost in our coding routine). That coding started with first level and second level categories. Yet, the aggregated results were missing the relations between categories. We chose a manual coding inspired by a methodology seminar held by Pr. Glaser where he insisted that memos should be printed and displayed in front of the researcher so that relations and patterns can emerge. Thanks to adhesive notes listing practices together with the related objects, we mapped these objects and practices by similarity and transformed the 4 most clustered areas of the map as separate tables, used to delimitate sub-cases. For each table, we then recoded the practices in order to separate micro-practices and field-level practices. We then wrote narratives of each sub-case.

On the practical side of that method, each case can then be studied as a coherent sense unit, and narratives are made much easier to write within a single sub-case. On the conceptual side, that method has the advantage of facilitating the emergence of « objects and practices

groupings » (each of them being considered as a sub-case). That concept will be discussed further in the discussion section.

We thus present here after four tables and narratives of these sub-cases, representative of our main findings. Our sub-cases illustrate disruptive practice work (1.1 & 1.2), maintenance and transformation practice work (2) and creative practice work (3).

4. MAIN FINDINGS

4.1. MAIN FINDINGS - PART 1: DISRUPTION: CONSUMPTION PRACTICES ENABLED BY AND SHAPING THE MATERIALITY OF THE FIELD

4.1.1 Grouping 1.1 - the non resistant: Compact Disc

Table 1.1 below is a representation of our first « objects and practices grouping » that delimitates a sub-case around the Compact Disc (CD). The following narrative reveals that the grouping is not just a methodological tool to delimitate a sub-case but also a process undergone by actors for practice work.

Table 1.1 « CD » grouping actors, components, practices and characteristics

Objects.	CDs (pressed or engraved CD-R, CD-RW), CD players (home, semi-mobile, mobile), Computers, CD drives (players, engravers), Digital Right Management systems (DRM), Sofwares (players, burners…), ear/headphones and/or speakers.
Actors (objects users).	Consumers, Producers, Sellers, Computer manufacturers
Practices (related to objects at a macro level).	(Music/CD) consumption. (Music/CD) reproduction.
Micro-practices (objects uses).	Listening, Buying, Copying (reproducing), Compiling, Sharing or Trading, Learning (how to use objects), Socializing.

Grouping characteristics.	Resistance/non-resistance. Resistant until the intrusion of computers (and included reproduction devices), then non resistant and connected with MP3 group (thanks to the same computers and transcoding softwares)

This first sub case showed that CDs were initially thought to be very resistant to consumer reproduction. Consumer reproduction was already seen as an attempt to challenge the institutionalized practice of professional (re)production. One of our field notes relates what a former music professional said to us off the record:

> « ... *of course the CD has not fulfilled its mission. (...) When it was conceived, it had to eradicate already existent consumer copies made on audio tapes. And it only partially attained that objective. (...) But when downloading came, it was feeling like a bettrayal. On behalf of the CD.* » (our translation).

A consumer interview confirms that copying and sharing among friends communities had already been for long a practice going against the power of the industry:

> « ... *recopying (music) for sharing with friends doesn't start with the internet. Personnaly, I copied vinyls, CDs and even the radio on audio tapes; I made compilations to bring them at friends'. When we bought a new album, we used to reproduce it on tapes for friends.* » (our translation)

And CDs, or more exactly the group of devices used by consumers to listen to music, including CDs and CD players, were supposed to guarantee that the industry interests only were defining the social practice of music consumption. First, CDs were much less subject to deterioration than vinyls and audio tapes. Second, the better sound quality was perceptible by consumers. And third, reproduction devices were too expansive for individual consumers. As a consequence, at that time, consumers had to use audio tape recorders and tapes to reproduce CDs, which was not so satisfying in terms of sound quality and, for that reason, was limiting reproduction. As confirmed by several interviewees and secondary sources, these three points were convincing enough for the consumer to conform to another institutionalized practice: buying music albums, at least until the intrusion of computers in the object grouping. Before the introduction of computers in the grouping CDs were actually very resistant to consumers practice work.

As computers became more and more democratized, as consumers learnt how to use them and as CD players were included in computers, consumers started using them to listen to music while using their computers. In that learning process, they were also choosing the other objects to add to the grouping such as softwares and earphones, headphones or speakers. And when computer manufacturers started replacing CD players by CD players+engravers, they also contributed to add to the objects grouping. That enabled consumers to start the new practice of CD reproduction (on CD-R or CD-RW). Several sources mention that new practice as the starting point of « the CD crisis », even before the introduction of MP3. The so called « piracy » actually started with « pirate CDs ».

Producers attempted to react to that potentially disruptive practice by adding another new object to the grouping: Digital Rights Management systems (DRMs) and started to defend author rights rather that the CD support itself. That latter point could have remained unnoticed in the huge amount of secondary sources about author rights defense and management. Yet one of our interviewees, a music shop tenant, insisted to draw our attention onto that point:

> *« What I don't explain to myself, is that the CD has not been defended for itself… I mean, all those debates around piracy and the Hadopi (French law against internet piracy)… No one raised a voice in favor of the CD support, as an object. Well, the CD is still a good support (he's showing the CDs on display on its store's shelves). Yet it was then. That was all about author rights. So what? I don't understand why they failed defending it.»* (our translation)

That verbatim helped us realize that at some point, the industry forgot to consider the objet and practices grouping as a whole.

4.1.2 Grouping 1.2 - the outsider: MP3

At that point, that is the creation of another grouping around MP3, that really accelerated the new practice of consumers communities music reproduction and shaped other new practices such as (worldwide) consumer based diffusion and distribution. As the former consumer says in the same interview:

« MP3 and the internet simply permitted that exchange (of music supports) at a larger scale, with 'internet friends', meaningly people that you don't always know personally but who share the same interests as yours. » (our translation)

Table 1.2 below is a representation of the second object and practices grouping and delimitates a sub-case around the MP3 format and files.

Table 1.2 « MP3 » grouping actors, components, practices and characteristics

Objects.	MP3 format and files, internet (and high speed internet), computers and servers, peer to peer protocol and exchange platforms, upload/download softwares, MP3 readers and associated softwares (such as the iPod together with iTunes and the iTunes store)…
Actors (objects users).	Independant researchers, consumers, internet pionneers, producers, computer and electronic devices manufacturers (especially Apple)
Practices (related to objects at a macro level).	(Music) diffusion/ distribution at a large scale, (Music) reproduction at a large scale
Micro-practices (objects uses).	Listening, Transcoding, Identifying and exchanging with communities of tastes and practices, Uploading (sharing or trading), Downloading (reproducing)
Grouping characteristics.	under attack relatively resilient thanks to the replacing of sharing platforms when closed, gaining legitimacy over time, bridged to the CD group (role of computers)

The MP3 format had been developed independently of the music industry and was released in the public at the beginning of our study period (1993 and 1995). That sub case shows that MP3 audio form was evaluated differently by consumers and professionals. For consumers, the sound was good enough and the size of the files was immediately opening the possibility of sharing them over the internet. That same format was sounding as « not thought for music » or « not good enough to be sold » in the ears of music producers and artists. Or, as a studio engineer puts it:

« Originally, the MP3 format is not thought for music. That is only voice that they were aiming at reproducing. And for the voice this is good enough. » (our translation)

When in the same time, internet pioneer consumers were astonished by the small size of the files (we must remember there that the capacity of floppy discs and hard drive was very limited back then) and the « good enough » quality of the sound, even for listening to music this time, from a consumer point of view.

Another grouping was then built around the MP3 by actors having enough knowledge of the internet, using computers as a bridge to import music files reproduced thanks to the first grouping. They also used the internet, exchange platforms and peer-to-peer protocol to upload music files. Next step was identifying and exchanging with other providers of such files, grouped in communities of tastes and practices thanks to the peer-to-peer platforms. Our sources converge about the importance of such communities, the will to give or to give back to community. A few sources mention the « spirit of the internet », what we would refer to rather as a community logic.

As the learning process spread and the consumers got higher speed/ unlimited internet connexions, the new practice of downloading was adopted by a growing number of music consumers. Yet, in 2001, Pascal Nègre (Director of Universal Music France) was still not seeing that object grouping in formation as important, saying « the internet, for music ? that will never work » (our translation). The future would tell the contrary, the new practices would become really routinized with an always inflating number of music files reproduced and distributed over the internet. Our interpretation is that, the industry was not evaluating the object grouping for itself but was rather attempting to see what it could bring to the original CD grouping.

Following first MP3 players manufacturers, Apple, on the contrary, saw the object grouping in formation for itself and as an opportunity, and added its own objects: the iPod, the iTunes file management software and the iTunes store, adding a computer manufacturer's contribution to the practice work on reproduction and distribution.

Then came new practices with new MP3/MP4 diffusion platforms such as Deezer, Spotify, Youtube, Dailymotion (streaming platforms)… As those disruptions were going on, producers

reacted by a counter work of maintenance, trying delegitimization, and calling everyone « Pirates ».

As that maintenance work did not prove efficient enough to really lower new consumer practices, other strategies were found, such as a final agreement with streaming actors that is closing our study period by legitimizing the streaming new practice. A field note taken at the 2014 industry market fair in Cannes, mentions that *the introduction allocution mentions that thanks to the recent agreements with streaming platforms, the crisis was officially over* - meaning also that the industry has the power to « get back in » thanks to a partial acceptation of the new object grouping as part of their maintenance work. We interpret that agreement as a recognition by the industry that they can still get hold on a specific objects grouping and shape social practices. What they are saying there is that streaming platforms are, in the end, a valid component for music diffusion in MP3 format, therefore supporting an official vision of this MP3 grouping, where file download is still seen as illegal reproduction but less central.

4.2. Main Findings - Part 2: Maintenance and transformation: Production practices reflecting and shaping the materiality of the field

Grouping 2 - the not so resilient: Studios

Table 2 below is a representation of our third grouping of objects and delimitates a sub-case around the studio materials.

Table 2 « Studio » grouping actors, components, practices and characteristics

Objects.	Analog and digital audio recording devices, computers, softwares
Actors (objects users).	Producers, technicians (sound engineers), artists, material manufacturers
Practices (related to objects at a macro level).	Production (technical side)
Micro-practices (objects uses).	Recording, Post-processing, Self-recording and post-processing

Grouping characteristics.	Resilient and working on maintenance. Challenged by miniaturization and democratization of its physical components and by an easier learning process.

That sub-case explores the changes from analog to digital studio material. While objects pertaining to the original analog objects grouping were merely replaced one by one, a process that ensured the group resilience, the addition of computers is seen by professionals as the main change. That addition is identified as enabling new micro-practices such as essay-errors in post processing. It is also introducing a visual dimension to sound which was formerly uniquely in audio form and therefore manipulable only by audio specialists. Sound engineering became accessible to less trained technicians, showing a change in the learning process of the profession. Digital recording produces a sound that is more pure (or « cold ») and independent from the components chosen in the object grouping. To maintain the former variety of audio productions (« studios identities »), studio material providers developed softwares that allowed to reproduce sonorities of the analog era, in a maintenance work. In other words, as the object grouping was evolving, the professionals performed a maintenance work by designing specific objets that would replace the missing parts (from their point of view) in the new grouping. Interestingly, while audio form of the productions is central in that maintenance work, yet, the pieces of software developed are described very visually as:

> *« ... visual plugins or apps if you prefer. With a very vintage look and feel. You even have to turn buttons or push cursors, like on the old analog machines. »*

In parallel, miniaturization and lower costs of production of electronics, also allowed these manufacturers of studio material to launch another version of the object grouping: the « home studio », therefore allowing artists to self-produce or micro-producers to get an easier access to the profession. That different version of the digital grouping was on the contrary performing a disruptive work onto production, allowing a less technical take on production, possibly handled by artists themselves (in a learning process) or by new entrant small independent producers, called « micro-producers » in our sources. The « professional music production » tenant's defensive reaction to self-production allows us to see that practice as disruptive institutional work and to characterize the reaction as a discursive maintenance work. Those practices were qualified as « self-production » by Pascal Nègre in 2012 together

with another grouping in formation around « crowd funding ». He's using the word « tribe » to describe the fact that artists can do everything themselves, together with supporter fans who fund them through the internet but immediately denigrate those practices to justify the industry practices:

> *« 'There is a certain number of bands who experience that (self-production)' He admits, quoting the name of Radiohead. 'Well, for them, it was even better, you could pay what you wanted. You could download the album and give back any amount of money. The problem is that three quarter of the people were not giving anything.' What Pascal Nègre forgets to say is that the experience had been extremely well paying, even with a large majority of non paid downloads.»* (our translation form a newspaper transcript of a television interview).

Using the word self-production either for home studio and for crow funding shows that taken together, the two objects grouping shape that new self-production practice at the field level. Yet, we need to investigate that crowdfunding platform grouping to understand how it conducts to creative practice work.

4.3 MAIN FINDINGS - PART 3: CREATION: PROSUMPTION PRACTICES ENABLED AND CONSTRAINED BY THE MATERIALITY OF THE FIELD

Grouping 3 - the opportunist: Crowdfunding platform

Table 3 below is a representation of our fourth grouping of objects and practices. It delimitates a sub-case around crowdfunding platforms (websites).

Table 3: « Crowdfunding platform » actors, components, practices and characteristics

Objects.	Computers, Internet connexion, Website, On-line payment, Public and private forums, Online music streaming, Studios, CDs, MP3s, signed CDs, « goodies » and artists personal objects.
Actors (objects users).	Artists, Producers, Consumers (internet contributors)
Practices (related to objects at a macro level).	(Music) production (technical and commercial sides)

Micro-practices (objects uses).	Searching and selecting projects, Funding, Encouraging, Socializing, Project following (inc. voting or commenting proposals)
Grouping characteristics.	Community building in connection with social networks (multiple communities). New practices creation (in competition with institutionalized music production practices).

Changes in the materiality of the field left space for the entrance of new actors together with original objects and practices groupings. Crowdfunding platforms are groupings conceived by entrepreneurs who ask consumers to back them (fund them and sometimes provide other resources) over the internet, using platforms composed of forums, on-line payment, music files (streaming)… Crowdfunding companies also gathered offices, furniture, office supplies… and sometimes even a recording studio. While entrepreneurs pursued their own commercial purposes, consumers engaged in artist self-production support, thus contributing to the creative practice work called self-production (therefore competing with the institutionalized production practices). Our fields notes from the netnographic immersion in such a platform, gave us insights about the starting point of the micro-practices. As new comers (contributive consumers) often engaged into funding expecting to discover a future hit (and then get cash back on the project), more experienced prosumers (producing consumers) considered that as another form of consumption, thus funding what they liked for their own consumption. Projects were presented in audio form (sometimes also in visual form but audio was essential) and that material was key in the consumers decision to engage in the new practices. Either they followed the first motivation or the second, the start point of the process was listening to the many music MP3 tracks proposed in the many available projects, select what seemed of interest and bond with the prosumer communities formed around each project/each artist.

A contradiction could emerge between the necessity for the entrepreneurs to show a certain degree of compliance with the incumbents' institutionalized practices in a market logic and the consumers (and artists) concern for creative independence (and potential disruption) in a more professional/artistic logic. The grouping was conceived and could be readjusted by components replacement or addition (more or less forums, opening or closing of chats, addition of physical objects as rewards such as CDs signed by the artists…) in order to shape

prosumers practices and give them more or less ability to express their concerns. That reshaping of the grouping by the company was clearly identified in our notes and actually really had an impact on practices (reducing the level of contestation by diminishing the possibilities to instantly discuss with other members of the communities. Adding physical rewards on projects to lower the financial reward incentive impact).

That grouping requires learning from the consumers and artists parts, relies on economic capital gathering, and fosters socialization in communities (public and private forums) centered on artists projects.

5. CONCLUSIVE DISCUSSION

5.1 OBJECTS AND PRACTICES GROUPINGS. OBJECTS AS COMPONENTS. THE GROUPING PROCESS AS A FORM OF INSTITUTIONAL WORK.

The first answer to our research questions is a contribution to the toolbox of concepts that are helpful to consider materiality in institutional work and TNI. Objects, either physical or non physical, should not just be considered one by one, but as objects and practices grouping processes. We propose to use the word « component » to characterize single objects that pertain to one or several groupings. This notion seems really important to us as we have seen that characteristics such as resilience had to be considered at the object grouping level, as well as the practice work that is enabled or constrained. As one component is replaced the group remains, if one is added, new practices could be enabled or constrained, when a specific one is taken out, the grouping could loose its former ability to shape practices or constrain them in a new way. The object grouping process itself is a very micro form of practice work, involving micro-practices of test and evaluation of the possibilities. These intentional micro-practices serve as a prototype and prefigure those that will finally spread and be routinized. We therefore see in those objects and practices grouping prototypes the start point of material practice work.

The objects grouping can result from spontaneous associations (as done by consumers) from already available objects or from a more organized conception (as done by a computer manufacturer like Apple or by music entrepreneurs such as the crowd funding platform we emerged into). That is also saying that both professional conception and opportunistic assemblage can serve different actors for institutional work, either usual forms or organizations like companies or less formal ones like communities of consumers in the present case. To understand that point further, that should be interesting to investigate other communities of interest that are involved in institutional work practices and rely on objects groupings to so. We think for example of citizens using the internet to organize more or less formally and claim for social change.

Also, that study confirms prior choices of empirical studies on materiality and institutional work: Jones and Massa (2013) studied buildings (a conceived type of objects groupings). Interestingly, the name « building » underlines that grouping processes can be building and also characterizes the resulting material entity. Raviola and Norbäck (2013) as well as Gawer and Phillips (2013) studied companies (an italian newspaper, the Intel group). Companies and groups are indeed groupings in our conception.

In bourdieusian terms, grouping processes can be considered as processes of symbolic capital gathering and developing. While the economic capital of the grouping is arithmetically higher than that of a single object, our case reveals that learning is necessary throughout the grouping process, in order to establish the grouping and also resulting from the grouping. In our field, learning is necessary to be able to use the MP3 grouping to listen to music in the end. But a greater cultural knowledge also results from listening to a great number of music tracks for free, meaning that cultural capital is risen collectively and individually from the use of the MP3 grouping. That is saying that objects and practices groupings not only result from and enable actors' institutional work but they are also a flexible part of the field structure.

That objects and practices grouping concept echoes to the notion of « objects systems » developed by Scarbrough, Panourgias, Nandhakumar (2015) while studying innovation. Yet,

our concept underlines that practices belong to the grouping and practice work is not totally equal to an innovation. A future research could cross and compare the two notions.

Moreover, the grouping concept supports a relational view onto agency Battilana et D'Aunno (2009, p. 47) where actors are also connected to materiality (meaningly objects groupings).

Last but not least, that objects and practices grouping concept allows us to contribute to the literature on practice work, adding it as a relevant level of investigation for material practice work. At that level, material practice work aimed at creating, disrupting or maintaining institutionalized practices can be considered as a process from its most micro preliminary practice works attempts to the diffusion and routinization of material practices at the field level.

5.2 THE BRIDGING AND COMMUNITY ROLES OF MATERIALITY: CONNECTING ACTORS AND PRACTICES THROUGH OBJECTS AND ENABLING ACTORS INSTITUTIONAL WORK

Second, our case supports a variety of roles performed by components. Answering to our second research question, we have identified a bridge component (computers) and community components (such as internet platforms: peer-to-peer platform, crowd funding platform).

This contributes to our understanding of how materiality plays different parts in order to enable or shape new practices and institutional work. The literature had pointed border objects and frontier/identity roles, we are thus adding bridge objects and community objects. Bridge object connect objects groupings and allow objects transfers from one grouping to the other. Computers are a bridge between the CD grouping and the MP3 grouping, allowing the original music files from the CDs to be transcoded in MP3 format. They are also a bridge between old and new studio equipments within the same grouping allowing that grouping to replace its components by transcoding again old music analog formats into new music files.

Community objects are particularly interesting because first, they add to the understanding of how objects contribute to the shaping of or enabling identity work (Jones and Massa, 2013).

each grouping we have studied have one or more community components. Companies, building, professional fairs or even an informal gathering of music fans or collectors can be considered for their community rôle: being able to host people in the same space and enable them to connect with each other and exchange or share, among other things, objects. But other components play the same role such as internet forums, private projects spaces on a crowd funding platform, messaging systems on file sharing platforms. Second, community objects add to the understanding of how grouping and new institutional work practices may be related to the emergence of institutional logics (Gawer and Philipps, 2013). In our case, community components support and are supported by the emergence of a community logic. Community components also contribute to practice diffusion and routinization, thus contributing to new practices institutionalization. Last but not least, community components enable socialization and connexion of wider groups of actors than those allowed by the actors individual initial social capital. Doing so, community components contribute to the collective and individual rise of social capital.

5.3 The grouping process: HOW THE AUDIO FORM OF OBJECTS IS USED BY ACTORS TO ENGAGE INTO OBJECTS AND NEW PRACTICES GROUPING.

Another answer of our third question (that complement the idea of grouping prototypes) is that, at the micro level, the audio form of objects has an influence onto actors initial objects selection in the grouping process and therefore on whether they engage into practice work. Our case also reveals that the same audio form can be evaluated totally differently by different groups of actors, depending on the potentialities that are subjectively identified. Our different sub-cases, also showed that that subjectivity is fueled, among other things, by actor's individual skills to evaluate the quality of a given audio object. And those skills develop with one's ability to have access to a wide catalog of music objects (or ability to gather the useful cultural capital).

This allows us to contribute on how micro-practices emerge and lead to practice work and how objects grouping processes start. That is also saying that while the object grouping is enabling knowledge (cultural capital) to grow among its actors, the practices emergence

process is also a learning process. That audio evaluation process echoes to how visuality is used to identify potentialities of action. The process we describe here is indeed is very similar to the concept of (visual) affordances initially developed by Gibson (1977, 1979) and pointed by the socio-material approach (for instance in Faraj and Azad, 2012).

It therefore advocates for a sensitive conception of practice work. As a consequence, that allows us to relate to another subject receiving growing attention, that of bodies and senses in organizations (Gherardi, Meriläinen, Strati & Valtonen, 2013), saying primarily that if objects are given attention, senses should be also in the scope. Reversely, it is also saying that, when studying bodies and senses in organizations, objects should also be taken into account as part of the same continuum of micro-practices, actors (and their bodies), senses and objects.

6. CONCLUSION

The four objects and practices groupings investigated in our study of the French recorded music industry (1994-2014) show how objects empower actors, either belonging to organizations such as companies or to more informal groups of actors such as consumers (or more largely communities), shape their decisions and practices and enable them to take an active part in practice institutional work. That study reveals that grouping empowerment can be described as various processes of social, economic and cultural capital acquisition but goes beyond that empowerment and confirms the enacting aspect of materiality.

More precisely and first of all, our case study contributes to the practice work, adding the « objects and practices grouping » as a relevant level of investigation for material practice work. At that level, material practice work aimed at creating, disrupting or maintaining institutionalized practices can be considered as a process from its most micro preliminary practice works attempts to the diffusion and routinization of material practices at the field level. Grouping constitute the level where (material) practice work is enacted. In that view, objects are relational entities: they relate to other objects and practices, and pertain to « object groupings » as components. Objects grouping can be conceived by organizations (for instance

when objects are designed) but can also be performed afterwards from already available objects and thus escape the object conceiver's hands.

Second, our study suggests the addition of two specific kinds of component objects in the materiality researcher toolbox proposed by Pinch (2008) to investigate materiality. « Bridge » and « Community » roles are evidenced in our study and complement the former concepts of « Liminal entity » object (or frontier object) and « border shifter » actors. Bridge objects allow resources transfers from one grouping to another. Community objects seam to play a crucial role in micro-practices routinization into collective practices.

Third, while investigating the emergence of micro material practices, our study leads to a sensitive view of practice work. In our case, the audio form of objects indeed influences actors decisions and engagement into practice work. Yet, these decisions and practices also depend subjectively on actors skills to learn and evaluate the audio form.

The investigation of consumers as institutional workers can also be seen as an answer to Ansari and Phillips (2011) who pointed a research avenue for studies on how consumers transform institutional fields. We must mention here that the consumers that we have observed or interviewed mostly belong to a certain category of advanced consumers, called «internet contributors » or « prosumers » in our last sub-case, meaningly consumers with a sufficient prior access to internet knowledge and material and with a propensity to give or give back to their communities. They express community logics and share common behaviors over the internet. They would probably be called « border shifters » by Pinch (2008). Yet, we don't know much about less advanced consumers and nothing at all about consumers that are totally left apart from the internet due to initial lack of knowledge and/or material means. While being a limitation to the present study, that is also suggesting that further research could be conducted in order to understand how consumer practices, as a whole, play a part in practice work. Also, and even if we have worked on several sub-cases, the generalization potential of our study would have to be confirmed thanks to similar investigations in other fields such as other creative industries or other fields where consumers or citizens are held

responsible for major social changes thanks to objects (such as the film industry or the taxi business).

Other research directions that we identify may include, but are not limited to, specific investigation of component objects roles. The notion of bridge echoes to the notions of borders, suggesting a possible connection with spatiality and boundary work. We have here before discussed the relation between community objects and community logics; we believe there is also a route for investigation, either keeping with the community objects and logics, or looking for other logics supporting and being supported by objects groupings: religious (as seen in Jones and Massa, 2013), family, state, corporate, professional, market…

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