

Accounting for the impossible prisoner

French Guiana overseas penal colonies in the liberal governmentality (1859-1873)

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Abstract : A la suite des travaux séminaux de Rose and Miller (Miller and Rose 1990, Rose and Miller 1992), de multiples recherches ont montré la manière dont la comptabilité constitue une technologie de pouvoir rendant possible certaines formes d'action à distance via l'opérationnalisation de divers programmes de gouvernement. Dans une telle perspective foucaldienne, les technologies comptables permettent de traduire sous forme calculatoire diverses modalités d'intervention sur la population, en générant chez les individus des formes spécifiques de subjectivation en vue de les rendre gouvernables. Ce courant de recherche a toutefois fait l'objet de plusieurs critiques. Il est parfois reproché à ce type de travaux de se focaliser exclusivement sur l'intention programmatique et les ambitions de gouvernement des individus associées, sans chercher à étudier la manière dont le pouvoir est réellement expérimenté par les individus concernés (e.g Armstrong 1994 ; McKinlay and al. 2010 ; McKinlay and Pezet 2017). D'autre part, ces études sont majoritairement focalisées sur des cas de succès de la technologie comptable dans la production d'un sujet conforme au programme de gouvernement initial. Ainsi, la possibilité même d'une efficacité limitée des technologies comptables à agir à distance semble avoir largement échappé à l'attention des chercheurs en comptabilité (Asdal 2011).

Dans ce papier, nous adoptons une perspective foucaldienne, en intégrant ces remarques. De cette manière, nous mettons en évidence la manière dont la mise en œuvre de pratiques de quantification comptable affecte le processus de subjectivation auquel sont soumis les individus, conduisant à la production d'un sujet éloigné des ambitions programmatiques initiales. Cette recherche se fonde sur une étude de cas historique, et mobilise un ensemble de sources primaires et secondaires. Elle porte plus précisément sur l'introduction depuis la métropole d'un système de calcul de coût dans les bagnes coloniaux de Guyane Française au milieu du XIX^e siècle. Destiné initialement à améliorer le contrôle des ressources humaines et matérielles des pénitenciers et à accroître la profitabilité des travaux forcés, nous montrons comment la mise en œuvre de ce système comptable n'a pas atteint les objectifs attendus. La mise en œuvre de nouvelles pratiques comptables a généré, en effet, un ensemble de choix et d'effets de quantification dont les combinaisons ont suscité des formes de subjectivation inattendues.

Au lieu de produire un individu réhabilité et réinséré socialement, le système carcéral et les pratiques de quantification associées créent un bagnard corrompu au cours de sa détention et condamné à la misère après sa libération. La mise en œuvre de procédures de calcul de coût, au lieu d'améliorer la profitabilité des travaux forcés a en réalité conduit à l'emploi de la main d'œuvre pénitentiaire à des activités non rentables, car dangereuses d'un point de vue sanitaire. Finalement, ce papier permet de souligner la précarité des projets de gouvernement des individus via les technologies comptables, en mettant en lumière une série de mécanismes générée par les pratiques de quantification affectant le processus de subjectivation attendu d'un point de vue programmatique.

1. Introduction

Depuis plus d'une décennie, les institutions pénitentiaires ont fait l'objet d'un intérêt grandissant de la part des chercheurs en comptabilité. Une série de recherches ont mis en lumière les conséquences de l'introduction de nouveaux modes de quantification comptable dans les prisons actuelles (see e.g English and Walker 2004 ; Cooper et Taylor 2005 ; Taylor and Cooper 2008 ; Andrew 2007, 2009 ; English 2013 ; Mennicken 2013, 2014 ; Lehman 2016). Ces travaux portent pour la plupart sur des problématiques actuelles. Beaucoup d'entre eux ont étudié les conséquences de la mise en œuvre de programmes de privatisation des prisons et de 'modernisation' des modes de gestion des services publics, en lien avec l'idéologie néo-libérale du *New Public Management*. Toutefois, force est de constater le faible nombre d'études portant sur la comptabilité pénitentiaire adoptant une perspective historique (see e.g Scorgie et Reiss 1997 ; Bisman 2007, 2009 ; Bigoni and al. 2019).

Or, une telle perspective apparaît fondamentale pour améliorer notre compréhension des diverses fonctions associées à la prison et de leur construction historique. De ce point de vue, les travaux de Michel Foucault concernant les institutions pénitentiaires (Foucault 1977)¹ apportent un éclairage théorique inédit sur le rôle de ces institutions et les formes de pouvoir qu'elles exercent sur les détenus et plus largement dans la société dans son ensemble (see e.g Bigoni and al. 2019). Cette recherche permet d'inscrire le projet néolibéral dans une généalogie soulignée par Foucault lui-même : « *for a century and a half the prison had always been offered as its own remedy : the reactivation of the penitentiary techniques as the only means of overcoming their perpetual failure* » (Foucault 1977, 268). Une telle approche théorique du fonctionnement des institutions carcérales et plus largement de leur rôle dans la société, même si elle est remise en cause et nuancée par un certain nombre d'historiens (see e.g Perrot and al. 1980 or Ignatieff 1978), revêt cependant un intérêt théorique majeur pour la recherche en comptabilité. En effet, les notions de discipline et de gouvernementalité développées par Michel Foucault ont donné naissance à un important courant de recherche en comptabilité, à partir des travaux séminaux de Miller et Rose (Miller and Rose 1990, Rose and Miller 1992), ou encore de Hoskin and Macve (1986, 1988). Les chercheurs d'inspiration foucaldienne ont ainsi mis en évidence le rôle fondamental joué par la comptabilité dans le développement et l'exercice de formes spécifiques de pouvoir sur les individus et les populations. Paradoxalement, la grande majorité de ces travaux ont mobilisé des terrains relatifs aux organisations de type industriel, délaissant les principales institutions étudiées par Foucault dans ses travaux relatifs à la discipline et à la gouvernementalité (les asiles, les écoles, ou encore les prisons)². Walker (2010, 632) note ainsi qu'une "another approach might be for historians to seek evidences of 'accountings' in organisations more clearly within Foucault's orbit", in order to « more convincingly assess whether accounting innovations impacted as disciplinary technologies ». C'est dans cette perspective que nous voudrions appréhender notre objet d'étude, à savoir la mise en œuvre d'un système de cost accounting relatif aux travaux forcés dans le cas des bagnes de Guyane Française entre 1859 et 1872.

A la suite des travaux séminaux de Rose and Miller (Miller and Rose 1990, Rose and Miller 1992), de multiples recherches ont montré la manière dont la comptabilité constitue en réalité une technologie

¹ Initialement publié en français sous le titre *Surveiller et Punir : Naissance de la Prison* (1975). Cet ouvrage fut édité en langue anglaise en 1977, sous le titre *Discipline and Punish : The Birth of the Prison* (1977). Les numéros de page relatifs aux verbatims utilisés dans cet article sont tirés de l'édition de 1993.

² Il convient de noter ici que plusieurs travaux d'inspiration foucaldienne en histoire de la comptabilité se sont intéressés à des institutions psychiatriques (Funnell and al. 2017, Funnell and al. 2019), pédagogiques (see e.g Hoskin and Macve 1986, Hoskin 1993, Walker 2010), religieuses (Bigoni and Funnell 2015) ou encore les prisons (Bigoni and al. 2019).

de pouvoir rendant possible certaines formes d'action à distance depuis un centre de calcul (Robson 1992), permettant l'opérationnalisation de divers programmes de gouvernement (see e.g Miller 1990). La comptabilité est alors une technologie qui permet de traduire sous forme calculatoire diverses ambitions politiques et autres volontés d'intervention sur la population (see e.g Robson 1991). Le fonctionnement d'une telle technologie de quantification contribue alors à rendre les individus gouvernables, visant à générer chez eux un phénomène d'auto-régulation par rapport à un certain nombre de normes et de standards de comportement (see e.g Miller and O'Leary 1987). Ainsi, la comptabilité cherche à induire un processus de subjectivation spécifique des corps, à travers lequel l'individu se construit lui-même comme sujet d'un pouvoir normalisateur via des pratiques disciplinaires telles que la surveillance ou l'examen (see for example Hoskin and Macve 1986, 1988 ; Carmona and al. 1997, 2002 ; Neu and al. 2015). Au-delà de cette dimension « individualisante », la comptabilité agit aussi comme une technique « totalisante » (McKinlay and Pezet 2010, 487), dans le sens où l'individu construit et régule son comportement en tant qu'élément d'une population et adopte une conduite adaptée aux modes de régulation de celle-ci (see e.g Graham 2010).

Ce courant de recherche en comptabilité a toutefois suscité un certain nombre de critiques (see e.g Armstrong 1994 ; Arnold 1998 ; McKinlay and Pezet 2017 ; McKinlay and al. 2010 ; Asdal 2011). D'un point de vue méthodologique, il a en effet été reproché à ces études de focaliser leur analyse au niveau des discours et des idéaux programmatiques des managers (Armstrong 1994, 31 ; Arnold 1998, 674), laissant finalement dans l'ombre la manière dont les cibles de l'intervention étatique ou managériale expérimentent réellement l'exercice du pouvoir et adaptent leur conduite quotidienne (Armstrong 1994, 25-26 ; McKinlay and al. 2010, 1018, McKinlay and Pezet 2017, 8). De cette manière, même si Miller et Rose reconnaissent le caractère précaire du succès des projets de gouvernementalité (see e.g Miller and Rose 1990, 10-11 ; Rose and Miller 1992, 190-191), peu de place est par exemple laissée dans l'analyse à l'existence de comportements de résistance de la part des individus (on this point, see Armstrong 1994, 37-38). D'un autre côté, la majeure partie des « governmentality studies » en comptabilité ont montré la manière dont celle-ci constituait une technologie efficace d'action à distance, en permettant de produisant des sujets conformes à un programme de gouvernement spécifique, et ce même dans le cas d'inscriptions comptables imparfaites (see e.g Dambrin and Robson 2011). Ainsi, la possibilité même d'une efficacité limitée des technologies comptables à agir à distance semble avoir largement échappé à l'attention des chercheurs en comptabilité, ainsi que le relève (Asdal 2011, 2), appelant ainsi à une attention plus marquée sur les limites de la quantification comptable à agir comme une technologie de gouvernement efficace.

L'objectif de ce papier est d'explorer les implications théoriques résultant de la prise en compte de ces diverses critiques formulées à l'encontre des « governmentality studies » en comptabilité, en répondant à la question de recherche suivante : « *Comment la mise en œuvre de pratiques de quantification comptable peut générer une forme de subjectivation éloignée des ambitions programmatiques initiales ?* ». Ainsi, notre recherche a pour ambition de répondre à l'appel de Asdal (2011) en s'intéressant à un cas où la comptabilité ne parvient pas à opérationnaliser avec succès le programme de gouvernement élaboré par les concepteurs du système comptable, mais conduit à l'inverse à la construction d'un sujet fort éloigné des objectifs initiaux. Notre démarche méthodologique et empirique s'est donc efforcée de tenir compte des critiques empiriques formulées à l'encontre des recherches foucaldiennes en comptabilité, dans la mesure où nous nous sommes concentrés sur la manière dont les acteurs expérimentent le pouvoir qui s'exerce sur eux et adaptent leurs routines et leurs comportements quotidiens lors de la mise en œuvre des pratiques de quantification comptables qui leur sont imposées

A cette fin, nous nous sommes appuyés sur une étude de cas historique, portant sur l'introduction d'un système de calcul de coût dans les bagne coloniaux de Guyane Française entre 1859 et 1872. Ses établissements pénitentiaires furent créés en 1852 par l'empereur Napoléon III pour accueillir les condamnés aux travaux forcés de France métropolitaine et des autres colonies. Conformément aux utopies pénitentiaires du XIXe siècle, la création des bagne coloniaux s'accompagnait d'un discours mettant en avant la réhabilitation morale du condamné par le travail et sa réinsertion sociale dans une société coloniale neuve à sa libération. A partir de 1859, les responsables du Ministère de la Marine et des Colonies introduisirent une série de règlement comptables dans les pénitenciers, en vue d'améliorer le contrôle des ressources humaines et matérielles des bagne pour limiter la corruption caractéristique de ce milieu carcéral et accroître la profitabilité des travaux forcés pour l'Etat. Mais cette initiative fut soldée par un échec à tous les niveaux : l'économie informelle perdura de plus belle sur les pénitenciers, les travaux forcés ne devinrent jamais profitables, et les libérés ne parvenaient pas à trouver du travail en Guyane, en raison de la concurrence de la main d'œuvre en cours de détention.

Dans le cadre de ce projet de recherche, nous avons consulté un ensemble de sources primaires, conservées dans la série H des Archives Nationales d'Outre-Mer (ANOM), ou disponibles en version numérisée en ligne. Nous avons aussi basé notre étude sur un ensemble de sources secondaires, principalement tirées de l'historiographie des bagne coloniaux. Afin de traiter ces données et d'élaborer notre raisonnement, nous avons adopté une démarche méthodologique préconisée par Lukka et Modell (2010) et Lukka (2014), reposant sur une approche abductive et le recours à la pensée contrastive.

Ce travail nous a permis d'améliorer notre compréhension de la manière dont la technologie comptable peut participer à générer un processus de subjectivation des individus particulier, parfois éloigné des ambitions programmatiques initiales. Nous avons étudié plus précisément la manière dont la mise en œuvre quotidienne des procédures de quantification comptable confronte les individus à un ensemble de choix, tout en les soumettant à une série d'effets. La combinaison de ces divers choix et effets peut alors affecter le processus de subjectivation auquel ils sont soumis, les conduisant à modifier (ou non) leur comportement. Mais les conséquences en termes de subjectivation des individus de l'introduction de nouvelles pratiques de quantification comptable sont parfois imprévisibles, et peuvent en fin de compte se révéler contraires à l'intention programmatique initiale. Cette étude nous a ainsi permis la manière dont la pratique comptable, en tant que technique individualisante, peut permettre aux individus de se ménager des espaces d'autonomie et de libre arbitre à partir desquels peuvent émerger des pratiques de résistance permettant à des régimes alternatifs de contrôle inter-individuels de se développer et de perdurer. Nous avons aussi montré que la quantification comptable, en tant que technique totalisante, pouvait générer des phénomènes de déconnexion entre les activités économiques et d'autres formes de processus qui régissent la population, ou des phénomènes de hiérarchisation de différentes catégories de population, impactant le fonctionnement de mécanismes économiques impliquant cette population. Notre étude de cas a alors permis d'illustrer la manière dont ces phénomènes sont alors susceptibles de produire des effets inverses à ceux attendus d'un point de vue programmatique.

Le plan de cet article est le suivant : nous présenterons dans un premier temps la littérature des « governmentality studies » en comptabilité, tout en détaillant les principales critiques associées. Cette partie sera l'occasion pour nous de revenir plus en détail sur les interrogations théoriques suscitées par ces travaux. Nous présenterons ensuite le contexte empirique de notre étude de cas, à savoir les bagne coloniaux de la Guyane Française au XIXe siècle et la démarche méthodologique que

nous avons employée. Dans une troisième partie, nous présenterons les résultats de notre recherche, avant de conclure par une discussion des principales implications de notre travail.

2. Theoretical Framework

In this paper, we mobilize the theoretical framework of governmentality, initially developed by Michel Foucault (Foucault 2004, 2001). We deepen the seminal works of Miller and Rose (Miller and Rose 1990, Rose and Miller 1992). Miller and Rose have joined the Foucault's notion of governmentality and the concept of action at a distance developed by Callon and Latour (Callon 1986; Latour 1986). They propose an analysis of the exercise of political power in liberal societies as an articulation between *political rationalities* and *government programs*, operationalized in practice through *technologies of government*.

Here, we would like to define these concepts, and to present the accounting literature in this theoretical framework and explore the capacity of accounting to exert power at a distance. Thereafter, we will discuss some aspects which “*seems to have largely escaped [the] attention*” of this research trend (Asdal, 2011, 2), notably situations where accounting does not reach its initial goals. The aim of our study is precisely to explore such cases, in the light of main criticisms addressed to works of “gouvernementalists” (Armstrong 1994; McKinlay and Pezet 2010). We will conclude this section by presenting our research question and the way in which we will answer to it.

2.1 Governmentality studies in accounting

After a reminder of the principal elements of the theoretical framework developed by Miller and Rose, we will present here the main findings of the governmentality studies in accounting.

Defining governmentality: the seminal work of Miller and Rose

Political rationalities constitute the first element of the Miller and Rose's theoretical framework. As a “*domain for the formulation and justification of idealised schemata for representing reality, analyzing it and rectifying it*” (Rose and Miller 1992, 178), it consists principally in the distribution of the different tasks or form of actions amongst various authorities, according series of ideals of government as justice, equity, efficiency, etc. These authorities act on specific objects, persons or populations, conceptualized as subjects of government through specific forms of knowledge and codified through a distinctive idiom, or a State vocabulary, enabling the formulation of political discourses. In short, political rationalities “*are morally coloured, grounded upon knowledge, and made thinkable through language*” (Rose and Miller 1992, 179).

The second type element put forward by Miller and Rose are the programs of government. They are the result of a problematization process based on the problems that are circulating in society at a given time. This process link government ideals with current problems, resulting from a deceptive measure of the real with respect to the authorities' ideals and highlighting defects or failures that have to be corrected. Problematisation process results in a specific depiction of the real, “*mak[ing] the objects of government thinkable in such a way that their ills appear susceptible to diagnosis, prescription and cure by calculating and a normalizing intervention*” (Miller and Rose 1992, 183) In short, such programmatic activities consist in the very definition of the rulers' obligations with respect to these current problems that have to be resolved according “*certain determinants, rules, norms and processes that can be acted upon and improved by authorities*” (Rose and Miller 1992, 183).

Technologies of government are the last component of the Miller and Rose's theoretical framework. They participate actively to the operationalization in the real world of the programmed actions and decisions about object of government, seeking to "*translate thought into the domain of reality, and to establish 'in the world of persons and things' spaces and devices for acting upon those entities of which [political rationalities] dream and scheme*" (Miller and Rose 1990, 8). Technologies of government are constituted by the multitude³ of strategies, technics and procedures employed in the attempts of deployment of programmes of government. In this way, they constitute a key element in the (attempts of) exercise of government at a distance that characterize the modern form of political power exercise.

Exerting power through accounting numbers

According to Foucault, in modern liberal societies, the main target of the exercise of power by the State is the population, and the improving of its welfare. Population is then elaborated as an object of various knowledges, revealing quite a few natural processes at work within it. Thus, the main target of government becomes the regulation of these processes with respect to specified norms, seeking to orientate indirectly the conduct of individuals in an appropriated way (Foucault 1977). In that respect, the Miller and Rose's triptic furnishes the appropriate theoretical tools enabling a better comprehension of the role of accounting in discursive elaboration of population as a target of government (Miller, 1990).

Indeed, these three components are articulated around the process of *translation* (Callon 1986), central in the exercise of government at a distance. This process consists in the elaboration of formal modes of representation of the real that enable the construction of objects of government. This process of translation constitutes the initial step to the implementation and the functioning of a network of inscriptions between centres of calculation and distant sites (Miller and Rose 1990, 5; Robson 1992). According to Miller and Rose (1990), this process of translation is realized through "*the particular technical devices of writing, listing, numbering and computing that render a realm into discourse as a knowable, calculable and administrable object*" (5). Accounting plays a prominent role amongst these technical devices.

First, such a translation process enables to connect political rationalities with government programmes, establishing "*a mutuality between what is desirable and what can be made possible through the calculated activities of political forces*" (Rose and Miller 1992, 182). Several studies highlighted the role played by accounting in such process. For example, many researches illustrated how accounting participate to the translation of some political rationalities into various government programs, including the efficiency audit (Radcliffe 1998), the fight against corruption by international organizations (Everett and al. 2007), or in the case of public services privatization (Rahaman and al. 2007). The range of political rationalities is vast: it embraces managerial rationalities (Radcliffe 1998) or broader ideologies as neo-liberalism for example (Cooper and al. 2016). Moreover, various forms of knowledge could complement accounting knowledge in such processes, as demonstrated by Himick (2016) for the case of actuarial knowledge.

Second, such translation process also occurs between technologies and government programs, under the form of implementation of many concrete calculations and associated practices, resulting in attempts "*to establish 'in the world of persons and things' spaces and devices for acting upon those*

³ "apparently humble and mundane mechanisms which appear to make it possible to govern: techniques of notation, computation and calculation; procedures of examination and assessment; the invention of devices such as surveys and presentational forms such as tables; the standardization of systems for training and the inculcation of habits; the inauguration of professional specialisms and vocabularies; building design and architectural forms- the list is heterogeneous and is, in principle, unlimited." (Miller et Rose 1990, 9).

entities of which they dream and scheme" (Miller and Rose 1990, 8). Several examples of such a translation process could be found in the accounting literature, both in historical cases of implementation of colonial programmes (Neu 2000a, 2000b; O'Reagan 2010) or more recent situations (see for example Radcliffe 1999, or the study of Himick 2009 concerning the privatization of Chilean pension system). But according to Miller (1990), it should be stressed the reciprocal character of such a relation between technologies of government and "*the programmatic realm of political rationalities*" (318). Indeed, if accounting technologies are mobilized during programmes implementation, programmes of government could also be shaped by accounting technologies (Miller and Power 2013, 581), as shown by Neu and Graham (2006) in their study of the Indian Act in Canada in the nineteenth century.

At the level of practices, the form of power exercise characteristic of governmentality requires the implementation of individualizing techniques (such techniques seek to act on individuals' body) and totalizing techniques, targeting individuals as a part of the population (McKinlay and Pezet 2010, 487). This process induces a set of 'self-forming' activities, in the sense that "*the subject is led to observe himself, to analyse himself, to decipher himself, and to recognise himself as a potential domain of knowledge*" (Lambert and Pezet 2010, 10). Individual is constructed as an 'acting subject', able to adopt a certain range of conducts through practices, but at the same time submitted to certain 'relations of force' that orientate his practices, and finally his conduct through the internalization of these practices (Florence 1994, cited by Neu and al. 2015, 53). In other word, the process of subjectivation is an indirect way of intervention on the conducts of individuals, seeking to influence their practices in order to adapt their behavior and their concerns in an expected way (i.e according to various norms and standards considered as desirable for the welfare of population). The vast array of calculative practices induced by the implantation of programmes of government and the functioning of associated accounting technologies enables the creation and the setting up of certain norms and standards (Rose and Miller 1992, 184). These norms can be imposed to individuals in distant sites through the establishment of a specific form of visibility on their actions with respect to these norms, "*making the previously incalculable calculable, reframing the concerns of others in ways that are amenable to its repertoire of ideas and instruments*" (Mennicken and Miller 2012, 21; see also Rose and Miller 1992, 184).

In terms of individualizing techniques, Foucault (1977) identified discipline as the interplay of several mechanisms that assure "*les moyens du bon dressement*" (201)⁴. Such mechanisms are, namely, "*hierarchical surveillance*" (Foucault 1977, 208). It is based on a pyramidal system of relays of data collected at any point of the organization, and "*normalizing sanction*" (or reward) (Foucault 1977, 209) aiming to qualify and repress (or support) specific conducts. The combination of these two mechanisms enables the practices of "*examination*", consisting in the differentiation of individuals through the qualification, the grading, and the punishment of their conducts according a certain range of norms (Foucault 1977, 217). These disciplinary practices of surveillance, normalizing judgement and examination are based on the production and the circulation of series of writing records documenting each aspect of individual conduct: "*The examination not only makes individuality visible, it locates it in a web of writing, transcribing attributes and their variations into codified forms, enabling them to be accumulated, summated, averaged and normalized-in short, documented*" (Rose 1990, 7).

In short, the production of a disciplined subject relies on several types of practices such as surveillance judgement, examination or writing (Ezzamel and Hoskin 2002, 337). In that perspective, accounting constitutes an activity in which individuals are involved in such practices. For example, several studies

⁴ The production of a disciplined and ethical subject.

showed how accounting could entail surveillance in organizations, providing an analytical visibility of physical spaces (Carmona and al. 1997, 2002), of abstract spaces (Vaivio 2006) or activities (Miller and O'Leary 1987, Hopwood 1990). Locating its apparition in the field of education and teaching (Hoskin 1993), through specific writing and notation practices, Hoskin and Macve (1986, 1988) showed how accounting became a practice of examination in organizations by implementing procedures of individual accountability. In that perspective, many studies have explored different organizational settings in which accounting technologies participate to the construction of individuals as subjects who act in accordance to various programmes of government. For example, the rise of the technique of standard cost budgets in the first third of twentieth century are part of a project of the construction of a governable individuals in the industry, according to a programmatic project of 'national efficiency' expressed through principles of scientific management and industrial psychology (Miller and O'Leary 1987, Knights and Collinson 1987). The construction of the consumer through diverse accounting techniques have also been documented (Walsh and Jeacle 2003; Jeacle and Walsh 2002). Such a construction by accounting numbers can be extended to many subjects in many institutional contexts: schools (Walker 2010), asylums (Funnell and al. 2017, Funnell and al. 2019) or prisons (Bigoni and al. 2019).

Accounting is playing a role in the implementation of totalizing techniques, through territorialization process (Mennicken and Miller 2012, Miller and Power 2013). Territorialization consists in the elaboration of accounting representations of organizations and more broadly the economy, which enable action at a distance. Accounting technologies define physical and abstract spaces and render them calculable, assigning financial values through quantification techniques to processes and individuals who inhabit them. Then, various forms of metrics could be elaborated around these spaces and their respective performances, comparing to the set of norms that the government seek to implement. As a result, these individuals are "*constituted as accounting subjects obligated to calculate or be calculated*" (Miller and Power 2013, 579) correspondingly to specific programs of government targeting the population. Several studies have explored this function of accounting. Such studies, like Graham (2010)'s one, about the construction of the figure of retired person in Canada, analyse how accounting technologies are mobilized in attempts of government of entire population categories. In that respect, numerous academic works have been performed on colonial and imperialist contexts (see e.g Neu 2000a; Neu and Graham 2004, 2006; Bush and Maltby 2004).

2.2 Material practices of power and the limits of action at a distance through accounting

The main focus of numerous governmentalities studies in accounting was the capacity of accounting numbers to exert power at a distance, even in the case of imperfect inscriptions (Neu and al. 2006, Preston 2006, Dambrin and Robson 2011). The quasi-exclusive attention of researchers devote to success of action at a distance through accounting is also noted by Asdal (2011, 2): "*there seems to be a tendency to take for granted the existence of a centre from which to govern and exert power, and moreover the will to power on behalf of the centre*". Asdal (2011) shows that accounting did not establish regular topology of action at a distance. In this way, she identifies a significant gap concerning limits of action at a distance effectiveness: "*something significant seems to have largely escaped our attention. This concerns the limitations of accounting practices and the exercise of power by numbers (...) But these technologies of government have their limitations. So what are they?*" (Asdal 2011, 2).

Even if the precarious character of successful deployment of government programmes in the real world did not totally escape the attention of first ‘governmentalists’ (see e.g Miller and Rose 1990, 10-11; Rose and Miller 1992, 190-191)⁵, little space was left for the analysis of such aspect of governmentality. Such observation meets the main critics formulated against numerous ‘governmentality studies’ in accounting (Armstrong 1994, 31; Arnold 1998, 674). These studies are almost systematically focused on the level of discourses and managerial programmatic ideals, without taking into account the effects induced by functioning of accounting technologies on subjects: “*the methodological critique is that governmentalism relies only on the accounts of executives or policy-makers, and never investigates the impact of managerial innovation on the organisation or its subjects*” (McKinlay and al. 2010, 1018). Empirically, such a statement implies a main focus on ‘blueprints’ (e.g handbooks, official instructions or administrative rules related to organizational practices to implement), rather than the way in which the “*governmentalist logic*” they underpin is “*translated into the everyday routines through which power acts and is experienced*” (McKinlay and Pezet 2017, 8; see also Armstrong 1994, 25-26). An important consequence of such analytical orientation is that such studies do not “*leave (...) space for new forms and cultures of grassroots resistance, whether individual or collective*” (McKinlay and Pezet 2010, 493) from individuals who directly experienced exercise of power through accounting technologies.

Resistance constitutes one of the most discussed aspects of Foucault’s work himself. Indeed, in the Foucauldian conception of the exercise of power, resistance and power notions are « *mutually constitutive, that one is the precondition of the other* » (McKinlay and Taylor 1998, 184). In other words, it is from resistance points that power can be exercised, and conversely, the appearance of resistances is included in the specific forms of the exercise of power: « *Resistance is integral to power. The existence of power relationships depends on a multiplicity of points which are present everywhere in the power network. Resistances are the odd terms in relations of power; they are inscribed in the latter as irreducible opposite*” (Foucault 1979, 95-96; cited by McKinlay and Taylor 1998, 184). More precisely, disciplinary power is reinforced by the existence of various forms of resistance, insofar they enable a better definition and orientation of behavioral norms mobilized in individuals subjectivation process: « *the very existence of power is seen as relying upon a multiplicity of points of resistance which play the role of adversary, target, support or handle within power relationships. (...) The existence of resistance does not mean that discipline is threatened. It means that discipline can grow stronger knowing where its efforts must be directed* » (Burrell 1988, 228). Nevertheless, detailed modalities of the existence of resistance possibilities remain unclear in Foucault’s writings (McKinlay and Taylor 1998, 184), leading to a lack of “*an adequate theory of resistance*” for Foucauldian researchers (Armstrong 1994, 38). As a matter of fact, the materialization of exercise of power practices received little attention from him: in his analyses, he creates his very own “surface archive” (McKinlay and Pezet 2017), focusing on “*the debates inside expert communities or public debates (...) that produced abstract knowledges and principles*” (8). Such analysis level does not allow a real account of material modalities of agency relations implementation, namely the inescapable part of arbitrariness and discretionary power of individuals (McCarthy 1994; cited by McKinlay and Taylor 1998, 184). Particularly, Mutch (2017) notices that in some parts of Discipline and Punish, Foucault focused on “*a single source, a source moreover that is concerned to lay out an ideal blueprint*” (104).

⁵ “*Each actor, each locale, is the point of intersection between forces, and hence a point of potential resistance to any one way of thinking and acting, or a point of organization and promulgation of a different or oppositional programme. (...) Government is a congenitally failing operation: the sublime image of a perfect regulatory machine is internal to the mind of the programmers. (...) Things, persons or events always appear to escape those bodies of knowledge that inform governmental programmes, refusing to respond according to the programmatic logic that seeks to govern them.*” (Rose and Miller 1992, 190-191)

But it turns out that these “*blueprint[s] cannot contain all the answers that routines have to be*”, nor *translate the way in which they “are adapted to meet new circumstances”* (Mutch 2017, 104). Another risk of such an approach is overinterpretation (Hoskin and MacVe, 2016).

Nevertheless, since the seminal study of Knight and Collinson (1987) on workforce resistance to managerial programmatic intentions, possibilities of resistance have been considered by several Foucauldian studies in accounting. Some studies highlight such phenomenon in line with the existence of former discourses and regime of practices. For example, Hoskin and Macve, in their study of resistance in Harper’s Ferry factory, evoke the existence of “*anti-disciplinary forces of pre-modern culture* » (Hoskin and Macve 1988, 72), whilst Neu and Heincke (2004) allude to the notion of ‘peasant praxis’ to characterize the more frontal forms of resistance of indigenous people against governmental policies. In the same vein, several studies of colonial and imperialist contexts underline the various attempts of resistance from indigenous people (Bush and Maltby 2004), which limit the efficiency of governmentality power at short term (see for example Neu 2000, or Neu and Graham 2006) or induce recourse to “*techniques of force*” (Neu and Heincke 2004). Hence, these studies show that such resistances through practices induce adaptations of initial government programs-or changes in strategies (see for example Papi and al. 2019) by the rulers to achieve their goals. Resistance did not prevent the success of the exercise of power through accounting numbers but may change its implementation or the initial program.

Other studies focus on the discursive level, showing how accounting numbers “*are poly-vocal resources that facilitate governance but also create the possibilities for resistance*” (Neu and Graham 2004, 595). In that perspective, the variety of accounting techniques may enable specific groups of actors to introduce alternative forms of discourses, rejecting the initial programme of government (see for example Ezzamel 1994, Rahaman and al. 2007 or Baños and al. 2016). For example, Neu (2003) shows, how the financial techniques introduced in Chiapas (Mexico) in order to “*improve the position of indigenous peoples vis-à-vis local elites, local elites were able to change or circumvent the techniques in order to maintain or improve their own social position. Certainly with respect to the governance of elites, techniques of financial governance are eternally optimistic and perpetually failing*” (206).

2.3 Studying the governmentalization process through micro-practices of accounting quantification

In this paper, we would like to focus mainly on the level of “*material practices of power*” (Armstrong 1994, 43), in order to take into consideration the McKinlay and Pezet (2010)’s critic against the “governmentalists” according which they “*neglect, first, the complex translation of abstract programmes of governmentality into local meanings and actions. Second, [they] leave no space for new forms and cultures of grassroots resistance, whether individual or collective*” (493). Consequently, we want to devote a large part of our analysis to “*deep archives*”, related to the concrete practices of exercise of power, namely the material practices of accounting quantification, carried out daily by individuals employed in various steps of accounts production. Our project here is to explore in more details “*the processes of governmentalization*”, exploring “*not just to the programmes of the powerful but to their operation and to the manifold ways that individuals, groups and populations absorb, comply and resist these projects*” (McKinlay and Pezet 2010, 494).

A cette fin, il convient de définir plus précisément notre objet d'étude, à savoir les pratiques d'inscription propres aux technologies comptables. La notion de technologie comptable recouvre un

vaste ensemble de techniques de quantification monétaires et de pratiques calculatoires (Miller et Napier 1993) qui permettent de produire des inscriptions ayant les propriétés nécessaires à la mise en œuvre de l'action à distance sur un domaine d'activité donné (Robson 1992). Ainsi, en termes de pratiques d'inscriptions, la comptabilité peut être considérée comme un assemblage de pratiques de *writing* et de *counting* permettant de réaliser les trois opérations fondamentales de la quantification comptable, à savoir enregistrer, mesurer et classifier (Robson 1991, 551 ; Graham 2010, 25).

Tout d'abord, les **opérations d'enregistrement** sont mises en œuvre par la production de diverses écritures comptables (accounting entries), associant différentes formes scripturales (par exemple les mots caractérisant l'intitulé du compte et les chiffres indiquant le montant associé). Ces écritures permettent de caractériser des comportements, mais aussi des flux monétaires, matériels ou humains par rapport à un certain nombre de catégories prédéfinies. Cette opération de quantification est structurée par des pratiques d'écriture et de comptage strictement codifiées, par la fréquence temporelle de ces enregistrements, l'identité des acteurs employés comme bookkeepers, les supports utilisés (e.g registres imprimés, livres de comptes en partie double) et les modalités de circulation des documents dans l'organisation. Dans un second temps, la mise en œuvre des **opérations de mesure** est caractérisée par des procédures d'évaluation monétaire. Les données collectées sur les comportements et les activités lors de la phase d'enregistrement sont alors traduites dans « l'espace d'équivalence » de la comptabilité, celui de la monnaie (Desrosières 2008a). Ce processus de valorisation peut être régulé par l'application de procédures codifiées et répliables (e.g méthodes de calcul de cout), ou bien par des négociations entre acteurs (par exemple dans la négociation de prix de transfert entre différentes unités organisationnelles). Enfin, les **opérations de classification** sont opérationnalisées lors de la phase d'agrégation des données, nécessaire à l'élaboration de formes de calcul économiques et la production de divers indicateurs (e.g prix de revient, taux de productivité...). Cette opération se traduit par la mise en œuvre de méthodes d'agrégation spécifiques, qui articulent un ensemble de schémas logiques et de processus rhétoriques, reliant différents aspects des phénomènes quantifiés, en lien avec un ensemble de savoirs comptables et économiques, sous la forme de document comptables particuliers (par exemple un bilan ou un compte de résultat).

De cette manière, d'un point de vue empirique, l'objectif de ce papier est de montrer la manière dont le déploiement de technologies comptables particulières (ici le calcul de coût) et la mise en œuvre des pratiques d'inscription associées dans une organisation peut contribuer à produire des sujets fort éloignés des ambitions programmatiques initiales, illustrant the Rose and Miller (1992)'s statement whereby "*techniques invented for one purpose may find their governmental role for another, and the unplanned conjunction of techniques and conditions arising from very different aspirations may allow something to work without or despite its explicit rationale*" (190).

Une telle démarche empirique nous conduit alors à questionner d'un point de vue théorique la manière dont l'opérationnalisation de technologies comptables impose aux acteurs des pratiques spécifiques d'écriture et de comptage (*writing/counting*) qui vont affecter le processus de subjectivation des individus d'une manière inattendue. En d'autres termes, il s'agit de répondre à la question de recherche suivante : de quelle manière les pratiques de quantification induites par le fonctionnement de technologies comptables peuvent conduire à la production de sujets inattendus, voire non désirés ?

Bien que plusieurs études aient identifié plusieurs autres modes de subjectivation, en lien avec les discours et des pratiques de production de « *truthful knowledge* » (Anderson-Gough and al. 2000), via des rencontres en face à face (Roberts and al. 2006) ou lors de collective trials (Lambert and Pezet

2010), la majeure partie des pratiques décrites par la littérature comptable font référence aux pratiques d'inscription que nous avons décrites plus haut. Selon Rose et Miller (1992), l'implication des individus dans un tel processus d'inscription induit un ensemble de pratiques qui participent à leur processus de subjectivation : « *Inscription itself can be a form of action at a distance. (...) Making people write things down and count them - register births, report incomes, fill in censuses - is itself a kind of government of them, an incitement to individuals to construe their lives according to such norms* » (187). Plus récemment, Neu and al. (2015) ont illustré, à partir du cas de la lutte anti-corruption, la manière dont de telles pratiques d'inscriptions (dans leur cas la production de formulaires) avaient le potentiel d'influencer le processus de subjectivation des individus, de manière « *to construct de facto disciplined and ethical bodies* » (Neu and al. 2015, 55). Dans notre cas, nous voulons montrer comment la mise en œuvre de pratiques d'écriture et de comptage associées à la production d'inscriptions nécessaires au calcul de coût dans une organisation génère un processus de subjectivation des individus différent de celui correspondant à l'ambition programmatique des concepteurs du système comptable.

Ce type de pratiques construit l'individu en charge des procédures d'écriture et de comptage comme un sujet « actif » (*acting subject*), dans la mesure où il est conduit à réaliser certains *choix* de quantification, tout en étant soumis un certain « champ de force », orientant ces choix ou bien le constituant comme sujet à certains *effets* de quantification. Ainsi, un *choix de quantification* peut être défini par l'existence d'un ensemble de possibilité (ou d'options) de quantification qui n'ont pas été anticipées lors de l'élaboration des règlements comptables. Une telle notion permet notamment de capter la manière dont de telles pratiques permettent potentiellement aux individus de maintenir une certaine forme d'asymétrie dans leur rapport d'agence avec les destinataires des comptes, permettant ainsi de donner naissance à des comportements de résistance, à préserver des intérêts particuliers ou perpétuer des régimes de contrôle alternatifs (Rose and Miller 1992, 190)⁶. Ensuite, un *effet de quantification* est généré par un ensemble de conditions liées au processus de quantification comptable qui peuvent potentiellement mener à des erreurs ou de mauvaises interprétations du contexte et des objets de la quantification. Ces conditions peuvent être de nature cognitive, en lien avec les formes de compréhension et d'interprétation générées par le processus de mise en nombre, ou bien de nature matérielles (Rose and Miller 1992, 190)⁷. En fin de compte, il apparaît que la nature de ces choix et effets est un produit de l'imbrication entre des conditions matérielles spécifiques, des phénomènes de résistance et la coexistence de différents régimes de contrôle, qui complexifient le processus de gouvernementalisation et sa prédictibilité (i.e la production d'un sujet attendu).

L'objet de ce papier est alors de montrer comment ces différents choix et effets de quantification auxquels font face les individus en charge des procédures de writing and counting se construisent à partir de l'imbrication entre des conditions matérielles spécifiques, des phénomènes de résistance individuels et collectifs et la coexistence de différents régimes de contrôle au sein de l'organisation. Nous voulons aussi montrer comment diverses conjonctions de ces différents effets et choix, en impactant le processus d'inscription va complexifier le processus de gouvernementalisation et sa prédictibilité (i.e la production d'un sujet attendu). Autrement dit, il s'agira de montrer comment l'opérationnalisation d'une technologie comptable associée à un programme de gouvernement

⁶ « *Each actor, each locale, [becomes] hence a point of potential resistance to any one way of thinking and acting, or a point of organization and promulgation of a different or oppositional programme* » (Rose and Miller 1992, 190).

⁷ « *impossibility of producing the technical conditions that would make [accounting technologies] work-reliable statistics, efficient communication systems, clear lines of command, properly designed buildings, well framed regulations or whatever* » (Rose and Miller 1992, 190).

particulier génère des pratiques matérielles de pouvoir inattendues qui vont affecter le processus de subjectivation individuel, produisant un sujet éloigné des ambitions programmatiques initiales.

3. Data and methodology : The case of French Guiana overseas penal colonies (1859-1872)

In this part, we will introduce the case of the cost accounting system introduced in the French Guiana penal colonies at the beginning of 1860's. This section will also be an opportunity to present the initial custodial program of mainland France and the expected effects of related accounting technology. Finally, we will detail the various (primary and secondary) and the methodological approach mobilized in this work.

3.1 Implementing a programme of government in French Guiana penal colonies through cost accounting

Due to his fascination with Great Britain and Australia (Redfield 2000, 63; Miles 1988, 21; see also Neilson 2019), Napoleon III decided, in 1852, to create penal colonies in French Guiana, based on the model of transportation of British convicts in Australia. In his discourse of November 12, 1850, Louis-Napoléon Bonaparte promised to replace port penal colonies in Toulon, Brest and Rochefort by new penal colonies in French Guyana, to "*make the forced labor sentence more efficient, more moralizing, less expensive and in the same time more humane, using it for French colonization progress*" (extract of the discourse, transcribed in an article of *Moniteur Universel*, dated February 21, 1852 [FR ANOM COL H11]). Transportation was officially created by the decree dated March 27, 1852. This reform has been conceived as a response to the multiple criticisms addressed by civilian population to port penal colonies, like concurrence between penal and free workers or the expense of such institutions (Pierre 2006). French Guiana penal colonies were administered by the Ministry of the Navy and the Colonies until their closure in 1953. Convicts were subjected to the *doublage* sentence after their release: they had to remain in Guiana for a period equal to their initial sentence (lifelong for sentences above eight years). A system of farming concessions, intended for a selected fraction of released convicts, was developed, in order to improve the colonization process of French Guiana. The Guianese experiment proved to be an economic and human disaster: mortality rates were very high and neither forced labors and farming concessions became profitable. Convoys from mainland France were stopped in 1867, and New Caledonia became the new location of Transportation (Barbançon 2003). From 1887, the *Relégation* law (1885) marked convicts return in Guiana, extending forced labor to for repeat offenders in terms of minor crimes (Sanchez 2009). Transportation was abrogated by the law decree of June 17, 1938.

Accounting became a Ministry concern from the early 1860's, linked to the rise of budget for transportation, often highlighted in letters addressed to the Governor of French Guiana (letters from Ministry to Governor, dated March 15, 1859 [FR ANOM COL H10] and July 8, 1860 [FR ANOM COL H50]). The intended aim was to calculate the cost of transporting a convict, to consider savings generated by prison work: '*On average, each transported convict costs 1.39 francs each a day, or 500 francs a year (excluding surveillance costs). What do they produce in return?*' (letter from the Minister to the Governor (July 8, 1860) [FR ANOM COL H50]). In this way, Ministry called for monetary accounts of productions and consumptions in each penitentiary (Dispatches from the Minister to the Governor, dated from June 20, 1859 [FR ANOM COL H10] and June 27, 1860 [FR ANOM COL H50]). But first

accounts reached in mainland France didn't appear realistic and seemed confirm that forced labor was little productive and that penitentiaries were mismanaged (Letter from the Minister to the Governor (July 8, 1860). [FR ANOM COL H50]). Minister called for the setting up of an accounting system, like those used in industry and farms (Minute from the Minister to the Governor (November 15, 1860) [FR ANOM COL H10])). These accounting rules were expected to improve monitoring of materials and products in penitentiaries warehouses through bookkeeping procedures, rationalizing supplies, quantifying budgetary savings in order to assess and compare the management of each penitentiaries, and finally rationalizing transfer of materials and penal laborers to other Guianese public departments by the way of transfer prices (Dispatches from the Minister to the Governor, dated from August 30, 1860 and November 30, 1860; Letters from the Minister to the Governor dated November 23, 1860 and February 1861 [FR ANOM COL H10]; Letter from the Minister to the Governor (December 14, 1860) [FR ANOM COL H50]).

These instructions resulted in the elaboration of three subsequent accounting regulations in penitentiaries. The first two were written by the Governor: the rule dated from January 1, 1861 (FR ANOM COL H50) prescribed bookkeeping procedures of production, consumption and warehousing in each penitentiary, whereas the one dated from January 1, 1862 (FR ANOM COL H50) defined valuation and control procedures of penal production. Finally, a last accounting regulation prepared by Ministry, dated from January 1, 1865, specified format and contents of printed models that Guianese administration had to send to mainland France (FR ANOM COL H50). In the same way, rules about transfer prices between Guianese public departments were written by Governor (Letter from Governor to Minister (October 28, 1862) [FR ANOM COL H25], Decision of February 6, 1863 (*Bulletin Officiel de la Guyane française* [FRA11247]) and Ministry (Ministerial decree on sales of Transportation's products (March 5, 1866) [FR ANOM COL 25]).

Hence, the government program of mainland France consisted in a transformation process of convict through the sentence of forced labor in overseas penal colonies. The purpose was in a first time to produce an individual moralized by work, in accordance with nineteenth century custodial utopias (Foucault 1975, 278). Second, the mainland France aim was to transform convict in Guianese colonist after his release, in order to solve recidivism issues. These two dimensions were recalled to the Guiana Governor by French Minister, in a letter subsequent to February 1861: "*From the outset, the program [of Transportation] is the same, (...) this program has two aims. 1° To cleanse mainland France of harmful element maintained on French territory by the existence of [port] penal colonies and this mass of freed convicts, who returned to civilian life more vicious than before their sentence, hastened to escape their assigned residence areas. 2° Provide to those whom justice has withered, the way to rehabilitate themselves, through work and colonization. Prison administration have, as a natural consequence of this program, two distinct tasks to fulfill. On the one hand the coercive and disciplinary mission, through the accomplishment of which it is substituted for the penal colonies of mainland France and designated for serve the custodial sentence. On the other hand, the moralizing mission, which is exerted by the double action of work and religious education.*" [FR ANOM COL H10]. Correspondences related to cost accounting system elaboration in the beginning of 1860's reveal that a new aim of economic profitability for the penal colonies was added to the initial program of rehabilitating individuals through the work of colonization: "*Give to penitentiaries administration a direction whereby the use of all strengths be done in order to make each institution productive, either cover themselves part of the expenses that the department covers today, or deliver products to the store, or deliver materials or labor to other public departments, by means of reimbursements from one chapter to another*" (Letter from the Minister to the Governor subsequent to February 1861 [FR ANOM COL H10]). Thus, the aim was also to transform the convict in a productive worker, profitable for the State.

3.2 The expected effects of accounting as technology of power

In this way, the accounting system implemented in Guianese penal colonies during the 1860's was designed in order to take in account the various dimensions of this government program. Here, we will describe the expected effects of such an accounting system, using the three distinctives accounting quantification operations previously described (recording, valuating, aggregating).

This process was supposed to operationalize the French Ministry's government program, elaborating two types of accounting entities. First, each penitentiary was analytically elaborated as an independent cost center, in which various productive activities unfolded. Second, the whole prison administrative service was designed as a colonial public service, whose main resource was population of carceral workers. In that way, quite a few productive activities or processes were rendered calculable, through the succession of the accounting operations of recording, valuation, aggregation. First, bookkeeping procedures related to works and inventories in penitentiaries [FR ANOM COL H50], as well as those related to Transportation's products transfers to other colonial administrations [FR ANOM COLH50; FRA11247], allowed to define the types of activities regarded as productive by the Ministry in mainland France. Indeed, outputs of these activities were the object of systematic monetary valorization, and data obtained were aggregated as annual accounting income of each penitentiary [Printed Model n°23; FR ANOM COL H50]. This document allowed administrative head to obtain Transportation overall income, by type of activities and by penitentiary [FR ANOM COL H59; *Notice sur la Transportation*], and to calculate the amount of associated budgetary savings. Thus, accounting system was conceived in order to orientate and monitor at a distance the type of activities to which convicts were employed and engage the penitentiaries in an efficiency discourse.

Moreover, Transportation was designed as a colonial public service, in charge with the management of carceral population in French Guiana, rendering calculable the individuals who composed it. In this way, bookkeeping procedures involved in individual ranking and categorization of convicts realized by wardens, depending on their comportment, their degree of rehabilitation and their obstinacy to work [FR ANOM COL H10/H50], as the bookkeeping procedures related to delivery of gratifications correlated to individual production level on certain worksites [FRA11247 ; FRA11232 ; FRA11250], enabled a first type of differentiation in this population, between 'good' and 'bad' penal elements. On the other hand, pricing procedures of penal workforce transfers to other Guianese administrations, arising from negotiations between administrative heads concerned [FR ANOM COL H25], and the aggregation of corresponding incomes in Transportation accounts [*Notice sur la Transportation*] should allow to rationalize convict's employment in Guiana colonization process, and constitute an additional budgetary resource for Transportation.

In the end, such a cost accounting system was expected to function both as an individualizing and a totalizing technique (McKinlay and Pezet 2010, 487), in order to govern convict both as an individual to moralize through productive work, and simultaneously as a part of carceral population, expected to colonize French Guiana. As an individualizing technique, the aim of accounting was to render calculable the moralization process and the productive effort of each convict. As a totalizing technique, this accounting system was expected to render calculable the various penal activities (productions in penitentiaries, convict's employment by other public services) at the population level.

The following table summarizes the expected functioning of the cost accounting system by Ministry heads, with respect to the three main accounting quantification operations involved:

Table 1. Formal procedures implemented by French Ministry heads

Quantification operations	Penitentiaries as independent cost centers	Transportation as a Guianese public service devoted to management of carceral population
Recording	<p>-Bookkeeping procedures in penitentiaries warehouses [Accounting rules of January 1st, 1862, FR ANOM COL H50]</p> <p>-Bookkeeping procedures concerning Transportation's products transfers [Letter from Governor to Minister (October 28, 1862), FR ANOM COL H25; Decision of February 6, 1863, FRA11247; and Ministerial decree on sales of Transportation's products (March 5, 1866), FR ANOM COL 25]</p>	<p>-Individual ranking of convicts [Accounting rules of January 1st, 1862, FR ANOM COL H50; Rules concerning the internal service of penal institutions of Guiana, 1855, FR ANOM COL H10]</p> <p>-Bookkeeping of penal workforce transfers [Letter from Governor to Minister (October 28, 1862), FR ANOM COL H25; Decision of February 6, 1863, FRA11247]</p> <p>-Bookkeeping procedures concerning gratifications granted to convicts [Accounting rules of January 1st, 1862, FR ANOM COL H50; Decisions added to the <i>Bulletin Officiel de la Guyane française</i>: January 25, 1862, FRA11267; January 30, 1863 FRA11247; October 7, 1861, FRA11232; May 15, 1867, FRA11250].</p>
Valuation	<p>-Cost calculation procedures [Accounting rules of January 1st, 1862, FR ANOM COL H50]</p>	<p>-Negotiations of Privy Council of Guiana [Minutes of Privy Council of French Guiana and Governor's correspondences, FR ANOM COL H25]</p>
Aggregation	<p>-Penitentiaries accounts [Accounting rules of January 1st, 1862, FR ANOM COL H50; statistical tables of Michaux, FR ANOM COL H59]</p> <p>-Transportation accounts [<i>Notice sur la Transportation</i> (1867, 1869)]</p>	<p>-Transportation accounts [<i>Notice sur la Transportation</i> (1867, 1869)]</p>

2.3 Historical sources and methodological approach

We drew the archives we used from several sources. First, the archive groups related to the administration of Guianese penitentiaries and to the penal colonies were transferred to the Archives Nationales d'Outre-Mer (ANOM—overseas national archives) in Aix-en-Provence. Most available documents are administrative (H series). This archive group pools correspondences between the Guianese administration and the Ministry, inspection reports, administrative rules, convict's dossiers and statistical or accounting documents. This archive group is related to administration of penal colonies in French Guiana and New Caledonia between 1792 and 1960. It represents 5693 boxes, for a total of 761 linear meters. We narrowed our research object to the case of French Guiana penal colonies under the Second Empire, between 1859 and 1872. We focused on boxes numbered H1 to H60. We also relied on newspaper articles, official publications (such as the *Notice sur la transportation* or the *Bulletin Officiel de la Guyane*, for example), available in digital version online⁸. Moreover, many secondary sources are also available in the historical literature on French penal colonies (see Pierre, Donet-Vincent, Barbançon, Sanchez, Toth or Redfield, quoted in references).

In order to document the accounting system elaboration process, we refer to correspondences, reports and studies about the introduction of a cost accounting system in penal workshops and penitentiaries. These data cover the 1859-1865 period and come from three boxes [H10, H25, H50]. We have selected these boxes through the online archival finding aid, with 'local accounting', 'penitentiaries organization' and 'cultivation, industry, sales' keywords. The level of daily accounting practices is documented by inspection reports found in the H series, and secondary sources, like testimonies of local actors found in historical literature. Finally, we studied diverse rhetorical and argumentative use of accounts by Ministry in mainland France. Here we refer to official correspondences between French Guiana and mainland France found in H series, papers of Michaux⁹ (deputy director of Colonies) [H59], official publications (e.g the first two publications of *Notice sur la Transportation* in 1865 and 1867) and political debates (e.g minutes and statement of the *Enquête Parlementaire sur le régime des établissements pénitentiaires* in 1872).

⁸ More precisely, we refer to *Criminocorpus*, a digital platform dedicated to French history of Justice, crimes and sentences; *Manioc*, a digital academic library specialized on the Caribbean, the Amazon and the Guianas; *Gallica*, an online database of archive groups of the Bibliothèque Nationale de France (BNF) and the digital library of ENAP (National School of Prison Administration).

⁹ E.H Michaux was deputy-director to the colonies during the period of our study. He was a strong advocate of the Transportation and overseas penal colonies. He has published a book about Transportation (Michaux, [1875] (1872), *Etude sur la question des peines*, Deuxième édition Challamel Ainé, Paris). Digital version : https://books.google.fr/books/about/%C3%89tude_sur_la_question_des_peines.html?id=dGYOAAAAYAAJ&re dir_esc=y Last access : 05/07/2018]). He was also heard as a witness by the Parliamentary Commission on the Prison System organized in 1872 by the Third Republic.

The following table details accounting procedures in French penal colonies, showing linkage between of quantification operations and archival materials:

Table 2. Documenting accounting practices through archival materials

Operations of accounting quantification	Location, and actors' roles in elaboration of accounts	Corresponding archives
Recording	<u>Penitentiaries (Wardens and convicts)</u> Inventory accounting Workshop accounting Bookkeeping of convicts' transfers Bookkeeping of gratifications delivery and convict's categorization	Printed models, inspection reports (H50); Correspondences (H10, H50); Accounting rules (H10, H50, <i>Bulletin Officiel</i>); Outside and inside observers (A.Londres ¹⁰ , E.Berryer ¹¹); Secondary sources
Valuating	<u>Penitentiaries (Wardens and convicts)</u> Valuation of production	Printed models, inspection reports (H50); Correspondences (H10, H50); Accounting rules (H10, H50, <i>Bulletin Officiel</i>); Outside and inside observers (A.Londres, E.Berryer); Secondary sources
	<u>Cayenne (Administrative heads)</u> Valuation of the daily cession price of a convict	Minutes of Privy Council of French Guiana and correspondences (H25); Accounting rules (<i>Bulletin Officiel</i>); Secondary sources
Aggregating	<u>Cayenne (Administrative heads)</u> Centralization of penitentiaries accounts (production, inventory) Centralization of convicts' transfers accounts Elaboration of quarterly and annual accounts of Transportation Drafting of accounting rules Budgetary accounting	Minutes of Privy Council of French Guyana (H25); Correspondences, reports (H10, H25, H50); Accounting rules (<i>Bulletin Officie de la Guyane Française</i>); Secondary sources
	<u>Mainland France (Ministry heads)</u> Aggregation of quarterly and annual accounts Centralization of budgetary accounts Publication of the Transportation Account Drafting of accounting rules	Correspondences, reports, accounting rules (H10, H50) Michaux's papers (H59) <i>Enquête Parlementaire</i> (1872) <i>Notices sur la Transportation</i> (1865, 1867)

¹⁰ Albert Londres (1884-1932) was a famous French reporter. He realized a reportage in French Guiana penal colonies in 1923, published in a book (Londres (1924), *Au bagne*). He reported the reality of incarceration in penal colonies, inducing strong reactions in French public opinion and initiating the long process of penal colonies suppression (on this subject, see Pierre 2000, 219-228).

¹¹ Henri Marie Pierre Berryer (1894- ?) was a military warden employed in French Guiana overseas penal colonies during seven months between 1929 and 1930. He is the author of an unpublished manuscript (Berryer (1931). *Sept mois au bagne*. [FR ANOM COL EE/II/2388/13]) in which he related his experience. For more information on Berryer, see Marc Renneville (2013), «Berryer, surveillant au bagne de Guyane (1931)», *Criminocorpus* (<https://journals.openedition.org/criminocorpus/2955>; last access the 27/03/2019). The manuscript is disponible at: <https://criminocorpus.org/fr/bibliotheque/doc/30/> (last access the 27/03/2019).

D'un point de vue méthodologique, plusieurs travaux récents ont mis en avant le potentiel des approches interprétatives pour réaliser des apports théoriques en comptabilité (Ahrens et Chapman 2006 ; Lukka 2014 ; Lukka et Modell 2010, 2017). Dans le cadre de ce travail, nous avons adopté la démarche méthodologique préconisée par Lukka and Modell (2010, see also Lukka 2014). Ils soulignent en particulier la capacité des approches de type abductives pour produire des « *thick explanations* ». Ce type d'approche consiste pour le chercheur à partir d'un fait empirique singulier (c'est-à-dire qui n'est pas décrit par la théorie) pour produire des hypothèses et des explications théoriques à partir des connaissances théoriques et empiriques à sa disposition (Lukka 2014, 563). Ces élaborations théoriques sont ensuite confirmées, infirmées et affinées par un processus « d'aller-retour » (cf. Table 3) entre le terrain et la théorie (Lukka and Modell 2010). Ainsi, dans le cadre de notre travail, nous avons dans un premier temps identifié un fait singulier à partir de nos premières données empiriques, à savoir la mise en place au sein des pénitenciers d'un système de comptabilité relativement élaboré et complexe, mais qui n'a finalement apporté aucune amélioration en termes de réduction des vols dans les magasins, ou d'amélioration de la profitabilité des travaux forcés.

A partir de ce constat, nous avons alors cherché à caractériser plus précisément ce fait empirique, par rapport à la littérature comptable existante, en ayant recours to *contrastive thinking, consistant principalement* en une démarche de sélection à la fois empirique et théorique de l'objet de recherche, dans le but d'améliorer la clarté et la force de ses arguments (Lukka 2014, 564)¹². De cette manière, nous nous sommes concentrés sur la notion théorique de l'action à distance (depuis la métropole sur les bagnes coloniaux), en focalisant plus précisément notre explication sur les obstacles ou les difficultés que nous avons pu identifier à partir des données de notre terrain. Enfin, nous avons aussi sélectionné le type de facteurs explicatifs associés, centrés sur les pratiques de quantification comptable, largement documentées par un corpus d'archives comprenant des correspondances administratives, des rapports d'inspections, des règlements, etc.

¹² “*Contrastive thinking is employed over the entire abductive process as the researcher focuses his/her attention on particular potential emerging explanatory factors instead of some others, collects further evidence based on his/her theoretical contemplation as well as clues from the field*” (Lukka 2014, 564).

Table 3. Abductive reasoning in the case of French penal colonies

<u>1ere étape</u>	Constat théorique : la comptabilité constitue une technologie de gouvernement permettant l'opérationnalisation de programmes de gouvernement spécifiques et la construction des individus en tant que sujets.	Etonnement empirique : les pratiques de quantification associées au système de calcul de cout mis en œuvre dans les bagnes de Guyane avec l'objectif explicite d'améliorer la profitabilité des travaux forcés et le processus de moralisation des forçats ne produit pas du tout les effets escomptés.
<u>2eme étape</u>	Constat empirique : une succession de gaps entre les procédures formelles de quantification prescrites par les règlements et les pratiques réelles induisent une multitude d'effets inattendus.	Questionnement théorique : comment interpréter l'existence de ces écarts entre les procédures de quantification et les pratiques réelles et caractériser les effets produits sur le processus de gouvernement à distance via la comptabilité ?
<u>3eme étape</u>	Elaboration d'une explication théorique : le cas étudié nous conduit à analyser l'occurrence de ces écarts entre les pratiques et les prescriptions réglementaires comme une forme spécifique d'expérimentation du pouvoir par les acteurs par laquelle ils se construisent en tant que sujets.	Confirmation empirique : nos données permettent de mettre en lumière l'apparition de divers choix et effets de quantification auxquels sont confrontés les acteurs en charge d'appliquer les procédures comptables. Nous montrons comment la conjonction de certains de ces effets et choix affectent le processus de subjectivation des individus de manière inattendue.
<u>Conclusion</u>	Notre étude permet de montrer la manière dont les pratiques de quantification induites par le fonctionnement d'une technologie comptable constituent des formes particulières d'expérimentation du pouvoir par les individus. Ce processus de subjectivation soumet l'individu à un ensemble de forces qui le contraignent (i.e des effets de quantification) mais lui accorde également une certaine forme liberté (i.e des choix de quantification). Un tel processus affecte les effets individualisants et totalisants des technologies comptables (McKinlay and Pezet 2010, 487), en permettant l'apparition de formes de résistances ou en affectant les modalités de gouvernement de la population. Ce travail permet alors de spécifier une série de mécanismes à l'origine de la « <i>congenitally failing operation</i> » du gouvernement par les techniques comptables (Rose and Miller 1992, 191), en aboutissant à la construction d'un individu qui ne correspond pas au programme de gouvernement initial.	

4. The production of a subject far from carceral utopias of mainland France

Notre objectif, dans cette partie, est de montrer empiriquement la façon dont la conjonction de divers choix et effets générés par les pratiques de quantification comptable affecte le processus de subjectivation des individus. Nous montrerons la manière dont ce processus aboutit à la construction du bagnard comme un sujet éloigné des ambitions programmatiques initiales de la métropole.

Un **choix de quantification** peut se définir comme l'existence d'éventualités ou d'options de quantification auxquelles font face les acteurs en charge d'appliquer les procédures de quantification, mais qui n'ont pas été anticipées durant l'élaboration des règlements comptables. Un **effet de quantification** peut quant à lui être défini comme un ensemble de conditions liées au processus de quantification comptable, qui peuvent potentiellement conduire à une mauvaise interprétation du contexte et des objets de la quantification.

Nous montrerons la manière dont l'apparition et la conjonction de ces effets et choix de quantification affecte le processus de subjectivation associé aux pratiques de quantification comptables. Nous détaillerons la manière ces divers choix et effets vont affecter l'impact des techniques *individualisantes* associées à la quantification comptable, mais aussi celui des techniques *totalisantes* (McKinlay and Pezet 2010, 487)¹³, sur le processus de subjectivation des bagnards. La construction du bagnard comme un sujet de la gouvernementalité comprend ainsi trois facettes différentes :

- Un prisonnier *corrompu*, car impliqué dans l'économie informelle des pénitenciers afin d'améliorer son quotidien,
- Un prisonnier *mort*, car obligé de travailler dans des mauvaises conditions sanitaires,
- Un libéré *pauvre*, car confronté à la concurrence de la main d'œuvre pénale sur le marché du travail guyanais.

4.1 A corrupted prisoner: Ordering population through recording process

A first condition of the effectiveness of implementation of a government program through accounting hinges on the capacity of quantification operations to induce reproduction in distant sites of some attitudes and expertise promoted by center of calculation (Armstrong 1994, 42). Such a reproduction could be ensured at the individual level by the surveillance induced by bookkeeping practices and associated accountability mechanisms (see e.g Carmona and al 1997, 2002). But some human and material characteristics of remote contexts may not be considered during the elaboration of accounting procedures. This may result in occurrence of some effects and accounting choices altering the degree of surveillance and finally the capacity of accounting to induce reproduction of prescribed attitudes amongst individuals. For example, in French penal colonies case, the aim of bookkeeping procedures was to render material flux visible to prison administration in Cayenne, in order to rationalize supplies and to reduce trafficking in penitentiaries. But numerous choices and effects

¹³ "governmentality marks the beginnings of two kinds of techniques: those disciplines that individualise by targeting the body and those pastoral techniques which regulate behaviours by acting on populations. Power is no longer solely deployed by the monarch but is constituted by the interaction of disciplinary and pastoral techniques together with the behaviours of individuals and populations." (McKinlay and Pezet 2010, 487).

associated with these procedures had significantly reduced effectiveness of this kind of corrective action at the individual level.

A poor reproduction of accounting expertise

Bookkeeping procedures implementation in penitentiaries required a certain degree of expertise: the daily recording procedures and the use of accounting material supports (tables, registers) involve specific competencies and sometimes a huge amount of time. Actors in charge of bookkeeping need adequate educational level (writing, calculation) and a workload appropriate to the number of bookkeepers. For example, introduction of daily books and minutes (*procès-verbaux*) in worksites and workshops, along with delivery coupons and inventory system in warehouses, required number of skills of wardens (e.g reading, writing, basic notions of counting).

But only a minority of prison staff had required competencies, as reported by the Governor in a letter sent to Ministry on September 14, 1861 [FR ANOM COL H50]. This problem appeared in 1862, when the second accounting system has been implemented. The workshop foremen oversaw daily bookkeeping procedures. These wardens had to produce daily accounting records of raw material and other inputs consumption, convicts' employment, their potential rewards and finally outputs production (Article 11, printed models 18 and 20 [FR ANOM COL H50]). Moreover, they had to prepare summary documents, at the end of each month (Article 12, printed models 19 and 21 [FR ANOM COL H50]). The reports of inspections conducted on the penitentiaries by administrative officers from the Commissariat de la Marine, ordered in 1861 by the Governor revealed the lack of accounting skills of most of workshop foremen: "*the administrative system of most [workshops] have been (...) necessarily assigned, due to numbers of vacancies (...) to simple Marine's clerks, often inexperienced and sometimes unable*" (Letter from the Governor to the Minister (September 14, 1861) [FR ANOM COL H50]). The inspection report of Girard in 1862 identified a multiplicity of mistakes and oversights, and a lack of accounting control, associated with this problem: "*the books of the [Montjoly's penitentiary] workshop (...) do not always indicate the profession of workers employed, and do not exactly state the [number of] workdays by workmen's category (...) moreover, they have not been checked by the Accounting Officer and the Commandant*" (Inspection report of Girard (March 28, 1862) [FR ANOM COL H50]).

As a result, penitentiaries heads were forced to employ convicts as bookkeeper: the inspectors Girard and Lidin suggested to employ convicts to assist wardens in charge of accounting (Inspection reports of Lidin (March 21, 1862) and Girard (March 28, 1862) [FR ANOM COL H50]). This decision did not improve the quality of daily accounting records. On the contrary, it exacerbated trafficking: "*The agents, ignorant or lazy, rely on writers and keychains (...) They are content with signing documents prepared by their part-time secretaries, who gain an influence that opens their careers to trafficking (...) And corruption flourishes*" (Confidential report by the Commandant of îles du Salut (1934), quoted by Pierre (2000, 109)). In this way, **human effect** appeared: the lack of writing/calculus skills and a small bookkeeping staff reduced the quality of accounting information (oversights, miscalculations, transcription mistakes, lack of control...). It altered ability of accounting to reduce trafficking, as it fostered new possibilities of coalitions between convicts and some wardens who wanted to improve their harsh living conditions (Toth 2003).

Another consequence of that situation was the difficulty for central administration to understand causes of accounts irregularities. Administrative heads in Cayenne tended to interpret these irregularities like a result of bookkeeper's incompetence rather than a consequence of existing trafficking. During the elaboration of quarterly and annual general accounts of transportation ("Compte général de la Transportation"), prison administration in Cayenne faced with numerous

errors and omissions contained in accounts from each penitentiary¹⁴. Such deficiencies made elaboration of Transportation's General Account very difficult: "*Penitentiaries had not been concerned about the administrative center [chef-lieu] task, when it will be time to appreciate its reports, and at that time, to do not confuse two different work's expenditures, it required patience and efforts that were not enough to prevent mistakes*" (Inspection report of Lidin (August 17, 1862) [FR ANOM COL H50]). Central administration could not correct these mistakes, because of multiplicity of accounts prescribed by accounting rules: "*operations centralization is very difficult, control almost impossible, when we faced many different records to which we necessarily have to refer to*" (Note on industrial accounting of penitentiaries, notified to Michaux (1864) [FR ANOM COL H59]). Furthermore, administrative control on production and accounting in penitentiaries were shoestring, due to communication difficulties, *quickness of inspection tour*¹⁵ and sometimes by some penitentiary head's concealment practices. Finally, faults in general organization of prison administration restricted its ability to obtain information required from other administrations, as noted the Inspector of Finance de Matharel, during a precedent inspection tour (Note about administrative and financial organization of Transportation service in Guiana, July 29, 1858 [FR ANOM COL H10]).

This situation is an example of a **centralization choice** of accounts in administrative center in Cayenne, far away from most of penitentiaries. Such a choice is a result of a lack of *control and coordination among actors in charge of accounts centralization*. In penal colonies, accounts aggregation required centralization of accounting documents from productive centers. Throughout this operation, it was possible that some errors and omissions in accounts would not be detected (or cannot be rectified). It could produce miscalculations in accounting aggregates and general accounts produced. Moreover, communication and travelling difficulties in French Guiana limited administrative heads' capacities to control accounting entries and identify sources of irregularities. At the same time, these difficulties constituted a good justification to Ministry of accounts irregularities: "*If, due to causes that I have to inform you, we failed to obtain rigorous statement, I am certain that we did not deviate significantly (...) when penitentiaries operations needed to be gathered in administrative center [chef-lieu] (...) numerous irregularities have been noticed in minutes [procés-verbaux] and these irregularities could not be notified, at least for the moment, to institutions (...) the most serious hurdle to overcome arises from communications difficulties due to dissemination of institutions which could not receive detailed explanations in time*" (Letter from Governor to Ministry, September 1, 1862 [FR ANOM COL H11]). Failure of prison administration in Cayenne to control accounting records reduced significantly capacity of bookkeeping procedures to make material flux visible and efficiency of potential corrective actions.

A poor reproduction of prescribed attitudes through accounting

Reproduction of prescribed attitudes in distant sites through disciplinary practices as surveillance can be limited, when such prescribed attitudes are inconsistent with inter-individual forms of control preexisting in remote contexts. In this case, implementation of recording practices was integrated in preexisting practices, rather than modifies them through the implementation of a new surveillance regime. As a result, preexisting regime of control in penal colonies were strengthened, insofar as necessity of expertise reproduction in distant site involved hierarchization phenomenon among

¹⁴ For example, convicts employed at internal service were not recorded in some penitentiaries (letter from Governor to Ministry, March 31, 1863).

¹⁵ In inspection reports, we can see that inspectors spent one or two days in each penitentiary [FR ANOM COL H50]. "*A penitentiaries inspection tour, prescribed by rules, is a fugue dominated by the constant concern of paper's accumulation on the desk in Saint-Laurent.*" Berryer, (1931, 151). NB: in the twentieth century, central administration has been transferred from Cayenne to Saint Laurent du Maroni.

individuals targeted by surveillance. Sufficiently qualified individuals to be employed as bookkeeper occupied a position enabling them to reproduce opposing practices with center's intentions. Instead of promoting a new individual surveillance regime in penitentiaries, the implementation of bookkeeping procedures initiated 'confirmatory' mechanisms (Walker 2016, 48), enabling bookkeepers to sustain preexisting local forms of social control.

A further consequence of recording procedures implementation was to create a set of possibilities of accounting entries manipulations, by the occurrence of a **categorization choice**. Elaboration of accounting recording procedures rely on different forms of categorizations, generated by specific discourses on the quantified object and imposing on the actors a particular form of rearrangement of their world. Systems of categorization are activated by the recording process, through the prior (or new) hierarchical structures. Nevertheless, implementation of categorization systems can face specific forms of exercise of power, associated with local rationales which pre-exist quantification. Actors in charge of accounting recording may impose their own mode of distribution of quantified objects between imposed categories. Therefore, the accounting recording process produces inappropriate records regarding the rules of repartition between the different categories. Accounting records constitute an "expected" form of representation of the reality, obscuring the local structuration of bookkeeping procedures by inter-individual power games. Some researches underline the prominence of this phenomenon, by the recognition of the role played by the 'surveillant' through "confirmatory mechanisms" (Walker 2016, 48), which sustain particular schemes of power relation or domination.

In the case of French Guiana penal colonies, convicts were organized into work squads of 40 men, directed by convicts recommended by wardens for their good behavior (Article 275 of the Règlement sur le service intérieur des Établissements pénitentiaires de la Guyane Française (May 10, 1855) [FR ANOM COL H10]). Accounting records incorporated this categorization of convicts: the name and matricule number of convicts of higher categories had to appear in a specific register (Article 17 and printed model 18 of the rule concerning the administration of penitentiaries (January 1, 1862) [FR ANOM COL H50]). But in facts, it appears that the classification power conferred to prison personnel enabled some of them to impose their own conception of the qualities required to progress up the internal hierarchy of convicts. Pierre (2000, 93) explains that corruption and collusion between convicts and some wardens were the norm in this hierarchization. Another example is provided by the case of a warden who misappropriated materials in warehouse, reported Berryer (1931): "*One day, he has been detected by a convict in charge of accounting records (...) the warden points his revolver under the nose of the convict saying: 'if you say one-word carrion, I'll spent you in the bay*" (154). Ultimately, bookkeeper's function enabled individuals to make some recording choices through which they could conceal corruption and trafficking practices. The categorization choice left to wardens in charge of such recording procedures allowed them to conceal coalitions with convicts. Such widespread corruption determined convict's categorization and their assignment to a given position: "*And this senior warden that used a bicycle given by a convict which avoided [an assignment in] a fearsome labor camp thanks for this gift. The bicycle has been stolen in a hangar*" (Berryer 1931, 154).

Furthermore, other possibilities of several accounting entries manipulations existed, due to the apparition of **falsification choices**, rendered possible because of recording procedures faults and lack of accounts control. Accounting records can be used in such a way as to constitute knowledge relating to quantified phenomenon and to support decisions and actions associated. It constitutes a particularly powerful form of argumentation to action, for example in the case of accountability relations or reward/sanction system. When actors are fully conscious about rhetoric properties of

accounting records, they can make a falsification choice, manipulating data to produce the “appropriate” book entries. This “gaming and cheating” phenomenon (Power 1997), producing a compliant representation of comportments (with respects to certain behavioral norms), allows to bookkeepers to conceal some aspects of reality, like fraud and trafficking for example.

Convicts employed in warehouses could for example conceal co-detainees’ misappropriations of provisions recording losses, as reported by Pierre (2000, 114). Convicts’ function in accounting quantification process allowed them to hide durably a set of practices and attitudes that bookkeeping was supposed to prevent. In this way, numbers of thefts in penitentiaries warehouse were rendered invisible. The warehouse’s books established in 1862 included the entry “*pertes et condamnations*” (losses) and “*déchets de routes ou de garde*” (transport or storage wastes) (Printed models 15, 25 and 20 [FR ANOM COL H50]). Berryer (1931) described the wardens’ traffics allowed by these book entries: “*A certain first-class guard (...) received cases of food and each arrival have to be received by an official commission charged with checking the goods on receipt, its weight etc. The warden opened carefully the cases, collected quantities that he needed before the commission tour and re-nail the packing cases. The commission noticed a difference and draw up a procès-verbal of loss*” (153).

Finally, operationalization of government program through accounting quantification at the individual level can be questioned by some effects and choices faced by actors involved in quantification procedure in remote contexts. As an individualizing technique of government, the introduction of accounting inscriptions network to implement at a distance a new surveillance regime requires the reproduction of particular expertise (e.g. needed for bookkeeping) and attitudes (e.g. honesty, integrity) during recording process. But such reproduction may be hampered by remote contexts characteristics, for example preexisting local rationalities or informal form of control. These factors, combined to some material factors, can lead to employ ‘wrong’ people as bookkeeper, generating an unexpected reproduction and reinforcement of informal hierarchies hidden from center. In this way, specific combinations between effects and choices faced by individuals involved in the recording process can reduce the efficiency of the accountability regime, altering the expected subjectivation process in an unexpected way.

4.2 A dead prisoner: Isolating economic activities from larger biological processes

The realization of programmes of government can also involve accounting quantification as a “totalizing” technique, seeking to act on individuals as parts of a population. Here, the aim is no longer to intervene on the individuals’ bodies, but to modify their conduct in a way that is consistent with objectives concerning the management of the population as a whole. These objectives can be related to various processes or activities related to the government of population, e.g. the level of wealth production or the sanitary situation. In the case of French penal colonies, a major aim of the introduction of accounting was to improve the profitability of convict’s labor. Cost accounting system implemented in 1862 made calculable and comparable revenues of productions in each institution. In so doing, accounting enabled elaboration of financial metrics of different types of production depending on corresponding budgetary savings amount.

Such visibility was supposed to enable mainland France administration to increase budgetary savings at a distance, by orientating convicts’ employment towards most profitable activities. But such a decision-making process, mainly orientated by accounting figures may ignore some causal relationships between economic activities and larger processes (e.g. biological processes associated with prison population), concealed throughout the accounting quantification process. It can lead to the elaboration of “*organizational units as economic entities whose performance can then be judged to succeed, fail or be risky in isolation from system or society-wide issues*” (Miller and Power 2013,

581), generating to unexpected effects, sometimes contradictory with the initial aims. More precisely, the implementation of accounting data aggregation procedures (definition of aggregates and other procedures of accounts construction) are designed to allow production of specific indicators, used for decision-making. As “*a means for organizing, integrating, and eliminating information*” (Espeland and Sauder 2007, 17), accounting aggregation generates a simplification phenomenon, eliminating certain information and harmonizing the remaining data in relation to common metrics (Espeland and Sauder 2007), decontextualizing the knowledge produced, with respect to daily penal reality. In other words, selection of information provided by accounting procedures may obscure many aspects of quantified phenomenon, and the related decision-making could be done through incomplete representation of situation.

In our case, we can characterize such a **decontextualization effect** in administrative heads’ decision-making in regard to the situation on the ground. Following an analogy with industrial and farming exploitations ([FR ANOM COL H50]), the aim of cost accounting introduction in 1862 was to assess the value of penal workers’ production to calculate the corresponding budgetary savings (Dispatch from the Minister to the Governor (June 27, 1860) [FR ANOM COL H10]). Thus, according to the Minister, accounting constituted “*a clear demonstration (...) of the expense that was really saved during the year*” making it possible to determine “*which institutions were well managed and which were not*” (Note from the Minister to the Governor (November 15, 1860) [FR ANOM COL H10]). Cost accounting was therefore designed as a rational decision-making tool: “*Every penitentiary can and must, to a certain extent, be considered as grand industrial institution: we must be aware, in a reasoned manner, of the whole and result of the operations*” (Minister’s note to the Governor (November 15, 1860) [FR ANOM COL H10]).

With the support of the various reports sent to the mother country (e.g see report by Rateau, lieutenant and former penitentiary commandant, addressed to the Minister (February 12, 1861) [FR ANOM COL H25]), accounts aggregation reveals the potential of forest exploitation from a commercial point of view for the transportation of convicts. Accounting documents sent to the mother country highlighted the profitability of forestry worksites in comparison with other activities. In fact, wood products represented between 8% and 100% of the annual profits generated by the Transportation¹⁶ and constituted virtually the only systematically profitable use of penal labor. Thus, Ministry heads focused on this use of penal labor, as attested both by several internal notes (Letter from the Governor to the Minister (July 16, 1864) [FR ANOM COL H25])¹⁷ and official publications: “*The Department (...) would like to find in this [forest] exploitation a way of having the penitentiaries of Guiana participate in production.*” (*Notice sur la Transportation* 1869, 2). On site, therefore, the Governor was summoned to devote many convicts to this type of worksite (Letter from the Governor to the Minister (July 16, 1864) [FR ANOM COL H25]), as well as to put in place adapted accounting procedures (Letter from the Minister to the Governor, February 1861 [FR ANOM COL H10]). In 1862, he established reimbursement procedures in the budget for the transportation of the wood produced: according the article 3 of the rule of September 22, 1862, each stere produced by convicts were payed 55 francs (letter from the Governor to the Minister (October 28, 1862) [FR ANOM COL H25]). Moreover, with the aim of having enough productive workers, a system of incentives varying in nature was put in place. In the early

¹⁶ According to the report of operations of 1862 [FR ANOM COL H50], work site forestry production accounted for 30% of annual profits generated by the transportation of convicts. According to the statistical tables found among Michaux’s papers [FR ANOM COL H59], they represent 100% of profits in 1866 and 8% in 1867.

¹⁷ “*Actively pursuing (...) the exploitation of the abundant forests of Guiana must be the program of the French administration.*” A note from after 1864 found among the papers of H. Michaux’s, deputy-director to the colonies. [FR ANOM COL H59]

1860s, a bonus system monetary rewards¹⁸ or supplements of daily rations¹⁹ for convicts was also established at these worksites.

The productive effort of the transportation of convicts was therefore applied to forest exploitation, with no regard for the sanitary risk that it represented²⁰. Then, Ministry was not immediately aware of the danger presented by this type of exploitation²¹, not only for convicts serving their sentences but also for released convicts: "*Driven by the desire to convert some resources into cash and by the failure of their harvests to take part in forest exploitation, the colonists are subjected to the morbid influence of this exploitation, and the fresh outbreak of sicknesses diminished their energy, which had already been weakened by more than one obstacle*" (*Notice sur la Transportation* 1869, 7). As a consequence of the decontextualization effect, promising accounting results of forestry worksites transmitted to Ministry hid the disastrous sanitary situation in these worksites. Given the extent of mortality rates (22,3 % in 1866 and 22,9 % in 1867), Ministry of the Navy acknowledged failure of forestry exploitations: "*information (...) received [by Ministry] shortly after revealed, in forestry worksites, a predicament: mortality rapidly increased*" (*Notice sur la Transportation*, 1869,2). These worksites were abandoned, the project of making French Guiana penal colonies profitable was forgotten, and New Caledonia became formally the new place of Transportation from 1867²². Given the impossibility of pursue initial profitability program, disconnection generated by accounting quantification between economic activities and relevant population constituted a major source of ineffectiveness of action at a distance. Prison reality was just affected by the concern for measurement: administrative heads had to assign a significant number of convicts in forestry work sites (Letter from Governor to Ministry (July 16, 1864) [FR ANOM COL H25]) to meet mainland France requirements, without profitability of forced labor improving significantly.

Cost accounting system implemented from mainland France has proven to be irrelevant to achieve profitability goals at a distance, rather, it has allowed to sustain local forms of actions in mainland France. Ministry heads had at their disposal accounting inscriptions, but they were not able to intervene effectively in Guiana: only proximity action was possible. In virtue of **argumentative choice**, Ministry heads had several options to aggregate components of average incarceration cost of a convict. The choice of a particular option could be orientated by miscellaneous interests (economic, political, ideological, etc.). Indeed, producing indicators and some analytic aggregates, the process of accounting aggregation allows to highlight some points of quantified phenomenon. Therefore, this process of variable implementation, or '*mise en variable*' (Desrosières 2008a) consists in formalization of relations between quantified object and relative data which vary in nature (logical, accounting, political). These relations are mobilized in action or argumentative ends by actors: combination of series of accounting formatting and calculations allows to elaborate "useful fictions" (Desrosières 2008b), which activate social uses of accounting, supporting particular forms of rhetoric. These useful fictions can be structured by selective representations of quantified phenomenon or comparisons

¹⁸ Decisions added to the *Bulletin Officiel de la Guyane française*: January 25, 1862 [FRA11267]; January 30, 1863 [FRA11247].

¹⁹ Decisions added to the *Bulletin Officiel de la Guyane française*: October 7, 1861 [FRA11232]; May 15, 1867 [FRA11250].

²⁰ The '*Hauts Chantiers*' saw, for the years 1866 and 1867, respectively, mortality rates of 22.3% and 22.9% [*Notice sur la Transportation* (1869)]. Pierre (2000, 101-104) describes the extreme living conditions of the convicts assigned to these work sites in the late 1800s, "*often barefoot, wearing the same outfit, which quickly found itself in tatters (...) Those who had not performed the imposed job were totally deprived of food*".

²¹ '*The information that (...) was sent [to the Ministry] later revealed an unfortunate situation at the forestry work sites: the number of fatalities rapidly increased.*' *Notice sur la Transportation* (1869, 2).

²² Convoys of convicts returned to French Guyana after the fall of the Second Empire, under the Third Republic (1870-1940).

allowed by the monetary equivalence space. These uses of indicators may lead to cover up strategies serving specific interests, producing partial or embellished representations of quantified phenomenon (see e.g Boje, Gardner and Smith 2006).

This point can be illustrated by the publication of Transportation's accounts in mainland France, in the first edition of *Notice sur la Transportation* in 1867, "aimed to reassure public opinion on the results of transportation in Guiana" (*Enquête Parlementaire sur le régime des établissements pénitentiaires*. Report of the vicomte d'Haussonville 1873, 444). The presentation of accounting results in the form of table constituted a powerful rhetoric tool, limiting the details of hypothesis and conventions of indicators construction. This strategy favored a positive representation of economic situation of transportation. Comparison between accounts sent to mainland France (General Statistics (1865) [FR ANOM COL H59]) and data published in the *Notice sur la Transportation* (1867) shows that different aggregation choices enabled to develop a flattering image of economic performance of penal colonies. For example, labor expenditures (monetary or in-kind gratifications) were not included in production cost of *Notice sur la Transportation* (1867): average revenue of a convict's workday was artificially increased by 1,20 francs, concealing realized losses on majority of penitentiaries. A second rhetorical use of cost accounting appeared in comparison between average cost price of a French convict and British one. This comparison, based on correspondences between Great Britain and Australia²³, was of course conducive to the French experience²⁴, and did not detail the Australian convict's cost price calculation (many values of cost price were reported in these correspondences, according identity of actors implicated)²⁵.

Such construction of a supposed profitability of forced labor was inherited from rhetoric used by Ministry of the Navy in early nineteenth to justify to the general public the existence of former penal colonies in French ports (Zysberg 1980, 182-183): "*It must be recognized that the expense of Transportation in Australia is much more than the expense of Guiana, since in this colony convict's cost did not exceed 480 francs in 1865 (...) we find in history of British Transportation, compared to the first years of French Transportation, more than one argument to justify its past and more than one motive to bode well for its future*" (*Notice sur la Transportation*, 1867, 55-56). Thus, for lack of possibility to improve forced labor profitability at a distance, accounting inscriptions only provided argumentative resources to Ministry to meet the requirements of 'public accountability' (Sinclair 1995)²⁶ and justify the continuation of Transportation.

Finally, as a « totalizing » government technique, accounting could affect the subjectivation process of individuals to orientate their conduct in accordance with series of objectives related to the population as a whole. For example, in the case of French penal colonies, cost accounting procedures allowed to elaborate the logging camps as a profitable (and thus desirable) productive activity for convicts, encouraging the prison administration to allocate important human resources. On the other hand, the gratification system linked to the individual production level spurred some released convicts to work on this type of site. But the decontextualization effect generated by accounting quantification,

²³ *Further papers on the subject of convict discipline and transportation presented to both houses of parliament by command of her Majesty, February 1864* (*Notice sur la Transportation*, 1867, 55). Annotated translations of these documents had been found in Michaux's papers. [FR ANOM COL H50]

²⁴ "Australian transportation's expenditure exceeds largely the Guianese's one, since, in the latter colony, the cost of a convict did not reach 480 francs in 1864" *Notice sur la transportation* (1867, 55)

²⁵ Commission of inquiry evaluated the annual cost of a convict in Port Arthur in 1862 at the amount of 38 pounds (950 francs), whereas the Governor of Port Arthur gave the cost of 34 pounds (850 francs). [FR ANOM COL H59]

²⁶ "public accountability is understood as a more informal but direct accountability to the public interested community groups and individuals" (Sinclair 1995, 225).

obscuring causal links between the sanitary situation and the productive activities, spearheaded the fail of the project of improvement of forced labour profitability. Instead of constructing the convict as a productive subject, he was employed to dangerous activities, sources of serious sanitary problems.

4.3 An impoverished released convict: Isolating categories of population from related economic processes

The case of the French penal colonies provides us another example of unexpected effects of accounting as a totalizing technique of subjectivation. The practices of accounting quantification, for example the introduction of transfer prices between organizational units, may induce shifts in concerns and attention of actors regarding the object quantified. It follows modifications of their conduct and decision-making. This phenomenon can be explained by the notion of 'reactivity' (Espeland and Sauder 2007), defined as alteration of individual conducts "*in reaction to being evaluated, observed, or measured*" (6). Implementation of monetary valorization procedures can induce a modification of behaviors and strategies of actors, for incentives reasons (Desrosières 2012), linked to shifts in power issues. New strategies can emerge in remote contexts, without conforming with initial intention of center. When such procedures concern specific categories of a population and related decision-making process (e.g employment bonuses related to certain categories of workers), it could be result in a differentiation process in the population, affecting the decision-making process related to each category. In this way, certain type of categories could be favored to the detriment of the others, sometimes in a way which is proving contrary to initial programmatic ambitions.

For example, in French penal colonies, the Ministry advocated the introduction of a system of "*reimbursement item by item*" for the transfer of penal workers and woods produced by Transportation (Letter from the Minister to the Governor (1861) [FR ANOM COL H10]; Letter from Governor to Ministry (October 28, 1862) [FR ANOM COL H25]; Governor's order of February 6, 1863 (*Bulletin Officiel de la Guyane*) [FRA11247]), with the aim of taking them into account in the cost accounting procedures, on the same level as the other production activities. Governor introduced in 1862 transfer prices of convicts' workday (Letter from Governor to Ministry (October 28, 1862) [FR ANOM COL H25]), to neutralize the budgetary impact of these transfers. Part of this sum was allocated to public purse (in the chapter *Various incomes of budget-Custodial service in Guiana*) and the rest (corresponding to advances in tools and supplies providing by prison administration) was directly paid back to the budget of Transportation, in the chapter *Incomes in reduction of expenses*. This regulation was extended to the rest of Transportation products few years later (Ministerial ruling about sales of Transportation products (March 5, 1866) and Governor's decision published in *La Feuille* (February 6, 1869) [FR ANOM COL 25]). Introduction of such transfer price was based on negotiations between Governor and other administrative heads, reported to Ministry by Governor (Privy Council's report (September 9, 1862); Letter from the Minister to the Governor (October 28, 1862) [FR ANOM H25]). Considering impact of these transfer prices on their budgets, negotiations were marked in 1862 by strong opposition from heads of relevant public departments. They deployed various argumentative strategies to minimize transfer prices.

We find first references to **material choices**, related to accounting valuation process. Such a valuation process consists in the application of outputs/inputs monitoring procedures and the conversion of physical quantities of inputs and outputs in monetary units, through reference values or certain calculation method. But material choices may occur here: these procedures may become inapplicable for material reasons, leading to valorization choices that could affect realism of related accounts. In that case, actors in charge of monetary valuation are under a duty to refer to "arbitrary" appreciations (beside imposed procedures), even they are unable to evaluate production. Prison officers in French

Guiana faced numerous material difficulties to value penal production. The 1862 accounting rule foresaw the formation of a monthly commission in penitentiaries. This commission had to inspect each worksite, workshop and warehouse and to produce reports containing “*value of works, appreciated according to reference values which will be adopted, according to the markets or following the estimation done by the commission who will proceed receipts*” (Article 13, printed model 22 of the accounting rule of January 1, 1862 [FR ANOM COL H50]). The inspection tours in penitentiaries revealed numerous dysfunctions in these accounting valuation procedures. Without registers of reference prices to apply, commissions of penitentiaries in îles du Salut, Saint-Louis and Saint-Laurent du Maroni were not able to evaluate penal production (e.g. see reports of the inspectors Lidin (March 21, 1862) and Girard (March 28, 1862) [FR ANOM COL H50]), or only in an arbitrary way (e.g. see report of the inspector Chevance (August 31, 1862) [FR ANOM COL H50]). In a September 1862 letter, the Governor explained it to the Minister by communication difficulties with far penitentiaries, and the lack of some reference values in Cayenne ([FR ANOM COL H50]).

Moreover, the inspectors reported numerous difficulties in the application of control procedures in penitentiaries. For example, Chevance noticed design and surveillance defects in warehouses, which prevented correct inventories²⁷ and stimulated trafficking²⁸. Another accounting evaluation difficulty concerned distance between penitentiaries and forestry worksites associated: “*It was very difficult to be decided on quantities of wood produced and spent since January 1, 1862 (...) monthly felled and squared timbers, as recorded in works accounts [procès-verbaux des travaux], instead of being hauled and brought to Saint Laurent, remain several months in forest and sometimes end up being lost*” (Inspection report of Lidin (August 17, 1862) [FR ANOM COL H50]). Berryer (1931, 37) describes the daily functioning of these worksites: “*Every week wardens come in the worksite to count wood steres (...) If there are seven piles of logs, the man has done his daily task*”. But this situation prompted convicts to commit fraud to obtain a bonus: “*Some try to cheat by piling the logs between the stakes in order that the steres appear complete*” (Berryer 1931, 37). Colonial administrative heads invoked these type of impacts in order to calling calculation method of transfer prices of woods into question, because of difficulties of valuating cost price in forestry worksites: “*Works are carried out in several places, under different conditions (...) here we are producing more, and there less; supplements of rations and tooling are about the same; the share of the expense for which they intervene in production is varying constantly; it is elusive as long as campaign is not finished and accounts are not closed*” (Minutes of Privy Council of Guiana (September 9, 1862) [FR ANOM COL H25]).

During these debates, there was also references to **conceptual choices**, in order to call calculation method of transfer prices of convict’s workday into question. This type of choice is related to sets of accounting concepts (e.g cost or revenue notions) and computational operations (relations between accounting concepts, rules of conversion into money) mobilized through accounting evaluation process. We can characterize here a conceptual choice, since the nature of the computational operations depends on body of accounting knowledge mobilized by actors, in specific times and locations. Thus, single accounting valuation method, immutable and applicable in all situations does not exist. Actually, adoption of such valorization method depends on a socio-historical articulation between specific bodies of knowledge and expertise, as well as power relations between involved actors (see e.g Ezzamel 1994, or Mennicken and Power 2015). In 1862, Governor decided to calculate

²⁷ Chief administrative officer of floating penitentiaries in Cayenne can “*never be sure of the real supply situation (...) despite censuses that he has to repeat frequently*”. Inspection report of Chevance (August 31, 1862) [FR ANOM COL H50].

²⁸ “*in provisions warehouses where everything takes place friendly, in a manner of speaking as in a family between some officials sometimes unscrupulous of the good ‘tentiaire’ [prison administration] and its employed volunteers*” Berryer, (1931, 45).

transfer price from average price of daily ration provided by prison administration (approximatively 80 centimes). In a letter dated from October 28, 1862 sent to Minister [FR ANOM COL H25], he described types of arguments invoked by public department heads: “*to reach the figure of 60 centimes, some members of the Committee have reduced to 6 hours the convicts' work time, whereas it is rarely below 7 hours. (...) I am struck (...) by the overstatement of gratifications amount estimated by public departments heads, to achieve reducing reimbursement price by this argument*”. Success of these strategies induced a gradual decrease of convict's transfer price from 80 centimes in 1862 to 30 centimes in 1868, preventing neutralization of budgetary impact of transfers.

Beyond the apparition of such argumentative strategies, implementation of transfer prices in French penal colonies induced a reactivity phenomenon. Such phenomenon may lead to a shift of actors' attention for cognitive reasons, related to commensuration (Espeland and Sauder 2007, 16). Conversion of qualitative characteristics of objects in financial values (or commensuration) modifies actor's cognitive representation of these objects, through a “(des)unification” mechanism (Espeland and Sauder 2007): “*Commensuration works mainly by transforming cognition; it changes the locus and form of attention, both creating and obscuring relations among entities*” (16). In our case, we prefer to talk about **commensuration effect**, in the sense that we highlight the consequences of Espeland and Sauder's cognitive effects on rhetoric strategies mobilized by actors. Quantified objects are grouped together, as they belong to a common metrics structuring a specific relationship of coherence: it is the ‘unification’ effect. They are also made distinct through the ‘(des)unification’ mechanism, as hierarchies on these metrics (Espeland and Sauder 2007, 19-20). In this way, rhetoric forms used by actors during negotiations are modified or reorganized by commensuration effect. Miscellaneous interests associated with rhetoric strategies may lead to excessive (or insufficient) valorizations of the objects.

The creation of a monetary metric of different categories of prison population altered administrative heads' cognitive representations of them. The price for a day of work in a penitentiary produced a “unification” effect, as long as the main employers of the colony considered convicts to be the same as free workers. The Governor described pressures exercised by the Privy Council of Guiana to reduce the price for the transfer of convicts, when the rule of 1862 was written²⁹, arguing efficiency and working time gaps between the two types of workers. Introduction of transfer price also generated a “distinction” process, as penal labor became progressively much less expensive than free labor: under the influence of those in charge of the local public departments, the price of 80 centimes set in 1862 was gradually reduced to 50 centimes for unskilled workers (Decision of June 4, 1863 (*Bulletin Officiel de la Guyane*) [FRA11247]) and later to 30 centimes³⁰. Therefore, accounting valuation process helped to establish a population of inexpensive workers who could be exploited at will and whose hiring was logically favored over that of free workers, as indicated by a report signed by a warden in 1872³¹. Reinsertion of released convicts, subjected to the ‘doublage’ sentence, therefore proved to be extremely difficult, as they were condemned to “*searching for work in a region of the world where none was available, as the few local companies preferred to use convicts serving their sentence, who*

²⁹ “*In their assessments, most of the commission members were adamant in their desire to have the price of a day reduced as much as possible.*” Letter from the Governor to the Minister (October 28, 1862) [FR ANOM COL H25].

³⁰ Decision of April 12, 1865 (*Bulletin Officiel de la Guyane*), which, on January 26, 1869 (*Bulletin Officiel de la Guyane*), justified price reduction of materials transfers set on December 26, 1868 (*Bulletin Officiel de la Guyane*). [FRA11256].

³¹ He denounced this situation, which he described as a “*reprehensible favor done to the industrialists of the country who [became rich] at the expense of the budget of the state, by paying convicts 1.20 francs per day, rather than the 3 to 4 francs per day that a civilian worker would cost*” (Donet-Vincent, 2003, 220).

were less expensive than liberated convicts" (Donet-Vincent 2003, 212). Introduction of transfer price of penal workers still serving their sentence therefore generated unexpected effects, by condemning many liberated convicts to vagrancy and begging: "*All the (...) visitors to Guiana (...) remember these emaciated paupers, drunk or sick idiots, sleeping in the streets*" (Pierre, 2000, 214).

Ultimately, convicts serving sentence were considered as cheap labor reserve, constantly renewed by new convoys from mainland France. But change in actors' perception of some prison population categories may produce disconnection with larger causal relationships at entire population level. Thus, steady decrease of transfer prices generated a foreclosure effect to the detriment of released convicts, sentenced to *doublage*. Public departments and other private employers logically favored recruitment of convicts under sentence, which costed less than released convicts, who need to be paid at the rate of normal salary (Donet-Vincent 2003, 220). Finally, shift of actor's attention generated by accounting quantification led to disconnection between favored category of prison population and functioning of labor market, impacting entire prison population. Consequences of this transfer price system were finally contradictory with the aim of social rehabilitation of released convicts in colonial society, put forward by French government to justify the creation of penal colonies in French Guyana.

5. Discussion and conclusion

Cette recherche revient sur les mécanismes mis en évidence par Foucault (1977) dans *Discipline and Punish*. Dans la quatrième partie, il dessine le mécanisme suivant : la première section, « Complete and austere institutions » dessine l'intention normalisatrice, dont il relativise l'efficacité dans la deuxième section (« Illegalities and delinquency ») pour montrer enfin dans la troisième section (« The carceral ») que cela n'empêche pas pour autant l'efficacité du programme. Si certains papiers foucaldiens (e.g. Miller et Rose 1990, Neu et alii 2006) ont insisté sur les difficultés de la gouvernementalité à produire les effets initialement attendus, nous avons détaillé ici la manière dont les mécanismes de quantification comptable contribuent à générer ces dynamiques inattendus.

La discussion reprend et documente les trois étapes qui aboutissent à une subjectivation inattendue pour interroger les conditions de possibilité de l'exercice du gouvernement à distance par la comptabilité. La première étape consiste à mettre en évidence l'articulation de programmes de gouvernementalité avec des procédures spécifiques de quantification comptable au travers de trois opérations (enregistrer, évaluer, agréger). La deuxième étape montre comment la combinaison d'effets et de choix associés à ces pratiques de quantification permet contribue à générer des écarts entre le programme et sa mise en œuvre. Enfin, la dernière étape met en évidence les conséquences des deux moments précédents sur le processus de subjectivation.

5.1 Programme de gouvernement et quantification

Dans le cadre d'une approche foucaldienne, la quantification comptable est analysée comme une façon de transcrire une intentionnalité programmatique dans l'activité économique. Les chiffres comptables sont utilisés pour matérialiser une intention politique et pour mettre en œuvre des programmes de gouvernement. Cette conception de l'usage du chiffre comptable est opposée par Miller (2001) à celle du chiffre manipulé que beaucoup de chercheurs comptables mettent en évidence, considérant cette dernière comme « *nontrivial, but (...) secondary to the study of the constitutive role of calculative practice* » (393).

A l'inverse, ce papier permet d'approfondir ce lien et de montrer l'importance de ce type de pratiques de quantification, dans la mesure où elles peuvent créer un premier écart entre l'intentionnalité programmatique et les pratiques. La quantification est habituellement pensée comme un moyen de transcription de la gouvernementalité : l'usage rhétorique ultérieur ou l'action à distance prévalent sur les différences pouvant exister entre le processus de quantification formel et les pratiques concrètes associées (e.g. Rahaman et alii, 2007).

Notre recherche essaie au contraire de mettre en évidence de tels écarts : la production du chiffre ne traduit pas toujours un programme de gouvernementalité, il peut en altérer la nature et les conséquences par la quantification. La nature même de l'opération quantificatrice est ici en cause. Le chiffre traduit tout à la fois l'intention gouvernementale et la représentation de la situation réelle pour construire la quantification. Et dans cette distance au réel, peut émerger une série d'écarts, ici mis en évidence.

Nous suggérons que ces écarts peuvent ici se matérialiser à travers trois dimensions, l'enregistrement, l'évaluation et l'agrégation comptable. A chacun de ses niveaux, l'opérationnalisation peut faire naître un écart. L'existence de ces écarts ne signifie pas que le processus de subjectivation ne fonctionne pas, mais plutôt qu'il atteint d'autres objectifs.

5.2 Pratiques de quantification et subjectivation

Ce premier type d'écart n'a d'influence qu'avec le processus de subjectivation. La différence entre les procédures et les pratiques de quantification entraîne des effets inattendus, soit parce que les effets produits n'ont pas été anticipés (e.g. fixation de prix de transfert trop bas), soit parce que des choix ne produisent pas les effets escomptés, les acteurs se réappropriant les outils comptables (e.g. corruption, détournement). Ce que ce papier montre n'est pas l'échec de la gouvernementalité ou même du processus de subjectivation qui est en jeu, mais la façon dont les écarts de quantification induise une autre forme de subjectivation, non initialement souhaitée. Le cas des bagne de Guyane permet de montrer la manière dont la quantification comptable, au lieu de redresser l'individu par l'économie et la morale, elle accentue à l'inverse la corruption. De la même manière, elle génère des conséquences inattendues au niveau de la population, en exacerbant la mortalité des détenus et la paupérisation des libérés. Le processus de subjectivation devait aboutir à la production d'un sujet réhabilité, travailleur et honnête. Les techniques individualisantes et totalisantes à l'œuvre aboutissent à des trajectoires de subjectivation différentes : corruption, pauvreté ou mort.

Une telle approche permet d'observer l'imbrication des formes de résistance et d'exercice du pouvoir à travers la quantification. Tout à la fois, l'administration locale applique les demandes de la Métropole (par exemple en recherchant la rentabilité via le développement des activités forestières) et résiste puisque cette quantification est mobilisée dans la poursuite d'autres objectifs (le montant des prix de cession est largement influencé par les préoccupations budgétaires des autres administrations coloniales).

La quantification comptable contribue donc à transformer la nature même du processus de subjectivation. Deux dimensions (ici combinées) sont mises en évidence : soit l'écart provient d'une méconnaissance du contexte initial et l'écart provient des effets de cette méconnaissance, soit cet écart provient de choix laissés aux individus dans le cadre du processus de quantification et qui ne donnent pas les résultats escomptés. Ces écarts proviennent d'une anticipation erronée des situations en jeu.

La quantification produit finalement son effet sur le dernier échelon de cette chaîne, le prisonnier. C'est sur lui qu'agit la subjectivation, en produisant des effets « individualisants » et « totalisants » (McKinlay and Pezet 2010) montrant tout à la fois l'effet de l'action à distance par la quantification et la subjectivation inattendue ainsi générée. En tant qu'individu, le bagnard est soumis à de nouvelles procédures de bookkeeping et des relations d'accountability qui induisent de nouvelles formes de résistance, centrées sur la figure du comptable (gardien ou détenu) comme cible privilégiée de la corruption. En tant que membre de la population carcérale, le bagnard est employé à des activités dangereuses pour lui, mais rentables pour la Transportation. De la même façon, la mise en place des prix de cession va modifier les fonctions économiques des différentes catégories de la population des bagnards (détenus en cours de peine et libérés), en constituant une réserve de main d'œuvre pénale à bas prix pour l'économie guyanaise, condamnant les libérés à l'errance et la misère.

5.3 La gouvernementalité de sujets inattendus

L'échec de la subjectivation, c'est-à-dire l'incapacité à transformer le sujet comme initialement souhaité, ne signifie pas pour autant l'échec de la pratique gouvernementale. Foucault (1977) le note lui-même, à partir du constat de l'échec du projet pénitentiaire en France métropolitaine : « *for the observation that prison fails to eliminate crime, one should perhaps substitute the hypothesis that prison has succeeded extremely well in producing delinquency, a specific type, a politically or economically less dangerous – and, on occasion, usable – form of illegality* » (p.277). De cette manière, l'existence, au sein des institutions pénitentiaires de pratiques conduisant à des formes de subjectivation à priori opposées aux objectifs programmatiques initialement annoncés peut être lus comme une forme de succès dans la mesure où ils permettent de gouverner une population. La production de la délinquance par la prison, si elle marque l'échec de l'intention programmatique, permet aussi de faire durer la prison, en tant qu'institution destinée à réprimer la délinquance ainsi produite. Les deux précédentes sections ont mis en évidence la contribution de la comptabilité à cette subjectivation imparfaite.

Cette recherche ne vise pas seulement à montrer comment la comptabilité contribue à une subjectivation inattendue, elle vise à montrer que cette subjectivation inattendue contribue à la mise en place d'une gouvernementalité nouvelle. Cette gouvernementalité de sujets inattendus par la comptabilité n'est pas définitive, elle appelle des changements, de nouvelles règles (comptables notamment) pour approfondir la production de sujets. Foucault le notait déjà: « *this production of delinquency and its investment by the penal apparatus must be taken for what they are: not results acquired once and for all, but tactics that shift according to how closely they reach their target. [...] yet they have always met with resistance* » (Foucault 1977, 285). Comme la subjectivation par la comptabilité est imparfaite, c'est cette même imperfection qui engendre ensuite de nouvelles dynamiques où la comptabilité viendra s'intégrer pour gouverner différemment les individus.

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