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A BIBLIOMETRIC ANALYSIS OF PUBLICATIONS ABOUT SLAVERY IN ADMINISTRATION AREA

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A Bibliometric Analysis of Publications about Slavery in Administration Area

Abstract

Studies on the impact of slavery in the History of Management and on the managerial and organizational practices have been neglected. As some authors claim, various legitimatizes disciplines have contributed to the practice slavery labour and its institutions. Since slavery labour had played a fundamental role in the economic and social life of countries in which this practice endured for centuries (USA and Brazil) it is agreeable to analyze the historical and social impact of slavery labor in management. For this reason, we conducted a bibliometric analysis of publications administration research area that had the theme of slavery, using the VOS mapping technique. Findings of co-citation analysis indicate the most used references include History and Economy works. Co-citation analysis also indicates that most of used works deal with the social and economic impact of slavery labour in American society. Regarding the bibliographic analysis findings indicate that studies on slavery are drifting to different perspective. Debates are moving to analysis on contemporary slavery – sexual, child slavery, labor slavery in supply chain – basic levels of supply chain such as supply of raw material – and the relevance of studies on slavery on historic studies

Key words: Bibliometric analysis; Slavery; Management History; VOSviewer

1. Introduction

Having a historical perspective in the study of Management is fundamental since it helps academicians and practitioners to build a more holistic view of business and its rituals. Besides, analyzing the historical perspective of Management helps the academia to understand the challenges of the present (Barros, 2015).

Literature on management history shows several studies regarding different ancient and pre-modern periods of management practice. However, we can see that researchers have not pointed to the period of slavery. As Cooke (2003, p. 1895) claim, the period of slavery “has been wrongfully excluded from histories of management”. In the same perspective, Hayek, Novicevic, Humphreys, and Jones (2010) believe that there has been an obvious denial of slavery in Social Sciences.

Regardless the fact studies on the impact of slavery in Management History and on the managerial and organizational practices have been neglected (Cooke, 2003; Hayek et al., 2010), studying the impact of the period of slavery in Management History is fundamental as various disciplines – Management, Law, Accounting - have contributed to the practice of slavery labour and its institutions (Hayek et al., 2010).

Besides that, management practice has inherited several characteristics of the period of slavery. In fact, Cooke, (2003, p. 1911) claims that “The empirical data demonstrate, therefore, that there was a substantial and growing group of people using what are now seen as management practices, who were known as managers, running antebellum plantations. What is also clear, and discomfoting, is that white supremacist racismo underpinned the creation of the managerial identity”.

Based on these arguments as well as on the importance of studies about the period of slavery - since slavery labour had played a fundamental role in the economic and social life of countries in which this practice endured for centuries (USA and Brazil) – I decided to conduct an agreeable analysis on publications about the period of slavery labor in Management.

To achieve this objective, I conducted a bibliometric analysis of publications administration research area that had the theme of slavery, using the mapping technique VOS.

Findings of co-citation analysis indicate the most used references include History and Economy works. Co-citation analysis also indicates that most of used works deal with the social and economic impact of slavery labour in American society.

Debates are moving to analysis on contemporary slavery – sexual, child slavery, labor slavery in supply chain – basic levels of supply chain such as supply of raw material – and the relevance of studies on slavery on historic studies

Besides this introduction, this article presents the theoretical background on dynamic capabilities, a chapter describing the methodology adopted in this research, the analysis and discussion of research findings, and author’s final considerations.

2. Theoretical Background

Researching the importance of slavery trade and labor is indeed relevant to administration research. Other areas of social sciences have invested on discusses and studies on this theme, as for examples accounting (Silva, 2013; 2014).

However, literature shows that the study on the influence of slavery on administration and organizational practices have been neglected since is slavery is theme that many prefer to overlook since it is not a positive portion of their History (Cooke, 2003. Hayek et al. 2010). In fact, we can infer that there has been a consistent denial of studying the influences and impact of the period of slavery on Management (Cooke, 2003; Hayek et al., 2010).

Despite this limitation on researches on Social Sciences, previous studies have shown that many aspects of organizational life such as paternalism and culturalism have been inherited from slavery structure of 18th and 19th centuries (Hayek et al., 2010; Willmott, 1993).

Paternalistic leadership refer to the a leadership style that has strong focus com discipline and authority combines with a fatherly and moral attitud (Hayek et al., 2010). A paternalis leader keeps this authority by demanding total agreement from his/her subordinates. In order to achieve this agreement – which is close to devotion -, leader show special consideration towards subordinates’ personal affairs (Hayek et al., 2010). According to Hayek et al. (2010), this paternalistic leadership style has started in the period of slavery as lords and masters used this authoritarian and benevolent attitude to get the submission of their slaves and to avoid riots.

Another aspect of Management that has been inherited from the period of slavery is culturalism (Willmott, 1993). For Willmott (1993) when organizations strongly encourage their members to embrace their culture and values they are requesting members to take responsibility on how they relate to the organizations in which they are employed. Culturalism is used to develop the perception that employees’ performance and behavior is highly tied to organization’s objective, which make employees see themselves to take the full responsibility for the success the relationship organization-employee (Willmott, 1993). For Willmott (1993), corporate culturalism is another inheritance of the period of slavery in Management practices and organizational life.

For Cooke (2003, p. 1913), the influence of slavery on management can be recognized on the “ongoing dominance from that time of the very idea of the manager with a right to manage” as well as on the management practices which we now name as “classical management and scientific

3. Methodology

Bibliometrics is quantitative method used to analyze scientific production. (Vanz & Stumpf, 2010; Macias-Chapula, 1998). Bibliometric methods are appropriate to conduct systematic and reproducible literature review of previous researches in a specific field. Besides that, bibliometric methods provide very useful results that can lead researchers on the most influential publications in their fields (Zupic & Čater, 2015).

The five main bibliometric methods are: citation, co-citation, bibliographic coupling, co-author and co-word. Co-citation analysis uses co-citation counts to evaluate similarities between documents, authors or journals (McCain, 1990). In this research, we used the mapping technique performed by VOSviewer software to perform the co-citation analysis and the bibliographic analysis of the publications extracted from WoS (van Eck, Waltman, Dekker, & Berg, 2010). The VOSviewer applied the VOS (Visualization of Similarities) **mapping technique that is an alternative to the technique of multidimensional scaling (MDS)** (Perianes-Rodriguez, Waltman, & van Eck, 2016).

To conduct this bibliometric analysis, we first extracted a list of all publications about slavery from WoS database (database maintained by Thomson Reuters). In this search process, we used the key words “slavery”, “slave labour”, “slave labor”. The search results on WoS extrated 317 publications.

4. Analysis and discussion of results

As mentioned above we extracted 319 articles from WoS, including published articles, conference articles and editorials. Out out these 319 article, we focused the ones with at least 6 citations. We proceeded in this way, in order to improve the quality of the bibliographic and counting analysis. As we analyze these 107 articles, we note that most of articles were published after the 2000’s. Figure 1 shows a graphic of distribution of publications through the decades.

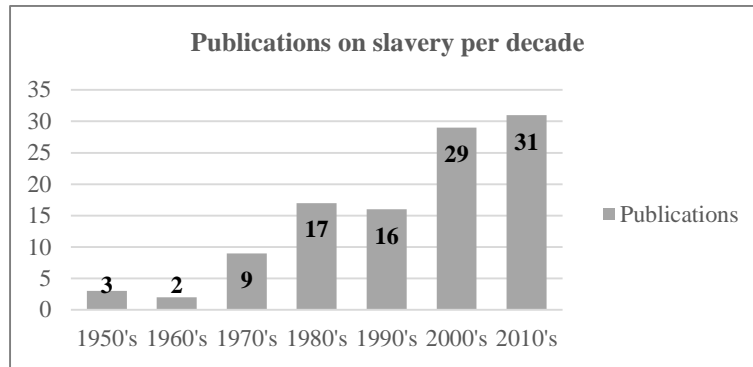


Figure 1: Distribution of publications on slavery aggregated by decade

The journals with more papers addressing the theme of slavery in Administration area are Journal of Economic History (15 publications), Explorations in Economic History (8 publications) and Economic History Review (5 publications). Even though the top three journals focus on Economic History, there are publications on journals in business and management area such as journal of Management Studies (3 publications), Journal of Management Studies (3 publications) and Supply Chain Management - An International Journal (2 publications).

As mentioned above, when generating the co-citation matrix, we selected the 55 most cited publications. As these are the most used references of the analyzed publications, we observed that most of these were published before 2000's – 48 publications in total. Figure 2 shows a graphic of distribution of the most cited references through the decades.

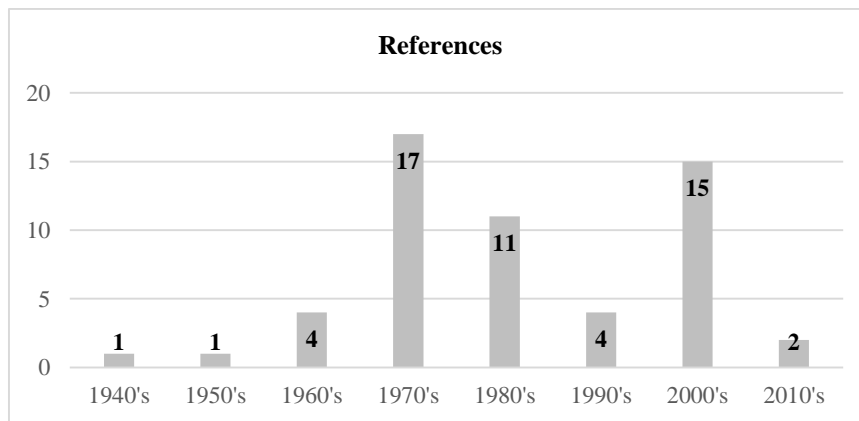


Figure 2: Distribution of the most cited references through the decades

As we analyze the network map of the co-citations generated by VOs, we see that these references were clustered into 6 clusters. Figure 3 illustrates the mapping and clustering of the 55 most used references in publications about slavery - appendix 2 shows the complete list of the 55 most cited references and their respective clusters.

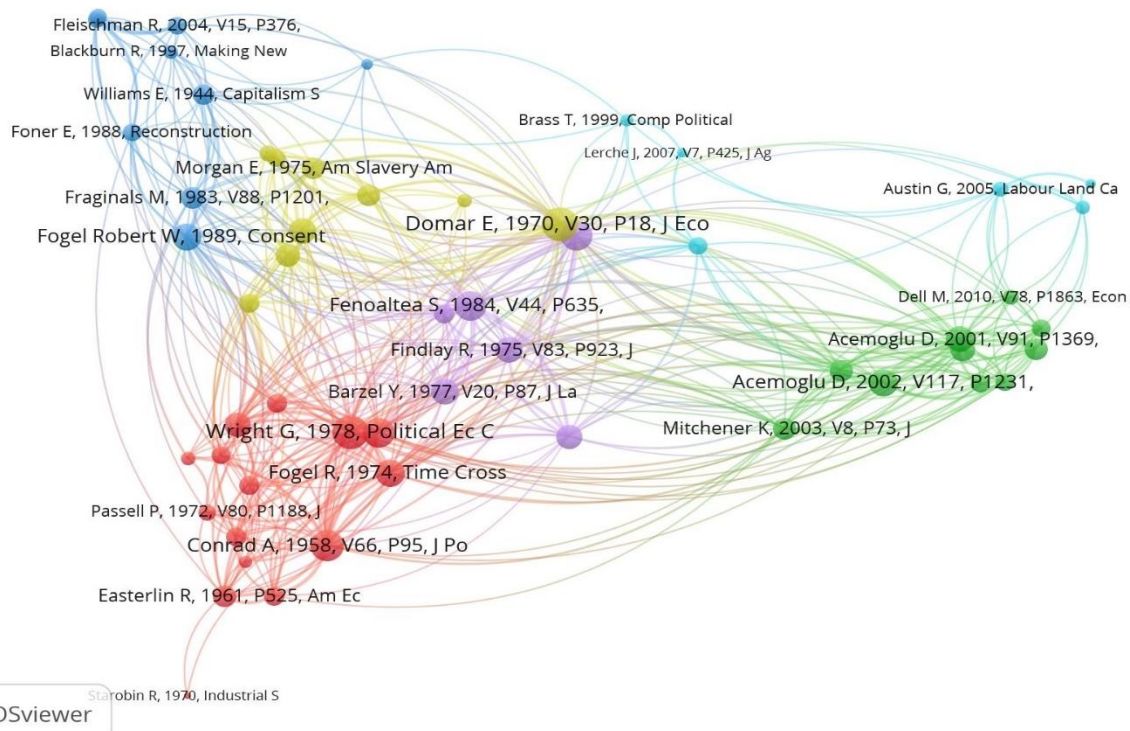


Figure 3: Mapping and clustering of the 55 most used references in publications about slavery

Cluster 1 aggregates publications about the History of slavery trade and slavery economy. In this cluster we find seminal works such as “Time on the Cross: The Economics of American Slavery” written by Fogel and Engerman (1974) and article The Economics of Slavery in the Ante Bellum South (Conrad & Meyer, 1958).

Cluster 2 aggregates publications about the institutions and their functionality in slavery economy. In this cluster we find more recent publications such as the articles “The structure of slave prices in New Orleans, 1804 to 1862” (Lagerlof, 2009) and “The Slave Trade and the Origins of Mistrust in Africa” (Nunn & Wantchekon, 2011).

Cluster 3 groups publications about how slavery was institutionalized and processed. These papers focused on the how the accounting, management and finances worked in slavery economy. Here we find papers that analyze the role of institutionalized processes on slavery legitimation such as “Accounting in service to racism: monetizing slave property in the antebellum South” (Fleischman & Tyson, 2004) and “The culpability of accounting practice in promoting slavery in the British Empire and antebellum United States” (Oldroyd, Fleischman, & Tyson, 2008).

Cluster 4 focuses on publications about the foundation and consequences of slavery in American economy and society. This clusters includes the books “Old South, New South: Revolutions in the Southern Economy since the Civil War” by Wright (1986) and “American Slavery, American Freedom” by Morgan (1975).

Cluster 5 groups publications that analyze the economic, social and managerial structure of slavery as well as how existing processes sustained the practice of slavery. This cluster includes the articles “Slavery and Supervision in Comparative Perspective: A Model” (Fenoaltea, 1984) and “On the Existence and Optimality of Competitive Equilibrium for a Slave Economy” (Bergstrom, 1971).

Finally, cluster 6 involves publication on slavery labor and the impact of this practice on the colonized African countries. Most of the works included in this cluster are book, including “Labour, Land and Capital in Ghana: From Slavery to Free Labour in Asante, 1807-

1956 (Rochester Studies in African History and the Diaspora)” by Austin (2005) and “Slavery and Colonial Rule in French West Africa (African Studies)” by Klein (1998).

We also analyzed the bibliographic and counting analysis performed by VOS software. With this analysis we intended to identify research trends on the theme of slavery in Administration area. Figure 4 illustrates the mapping and analysis of bibliography according to the evolution of the citations through the years. The closer the color of the nets are of green and yellow, the newer are the citations of these publications. As we analyze this map, we can infer if debates on a specific are more prone to grow or decline.

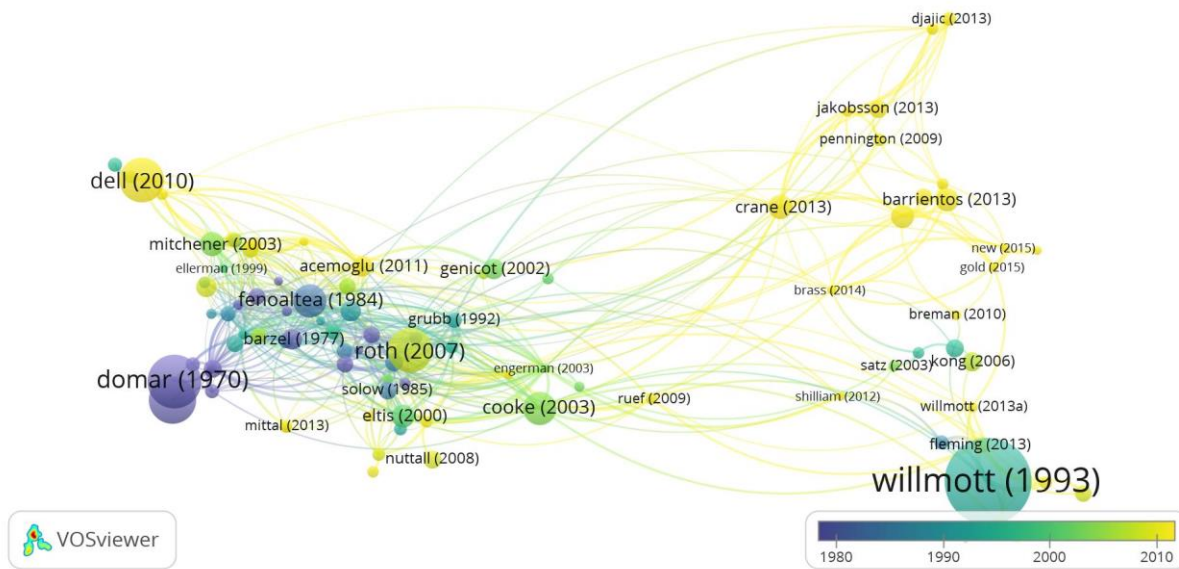


Figure 4: the mapping and analysis of bibliography according to the evolution of the citations through the years

As we see in figure 4, the most greenish and yellowish clusters are clusters 2, 4, and 5 (Appendix 1 shows the complete list of references and their respective clusters. Cluster 2 groups 12 articles that involve 121 citations in total. Cluster 4 groups 10 articles which correspond to 689 citations (which infers that publications included in cluster 4 are the most cited. Finally, cluster 5 includes 9 articles with 167 citations in total.

Publications included in cluster 2 discuss the aspect of contemporary slavery that includes **sexual and erotic labor** - “What it feels like for a whore: The body politics of women performing erotic labour in Hong Kong” (Kong, 2006) – **child labor** – “Child labor: A normative perspective (Satz, 2003) – and the **modern slavery labor** that exists in the basic levels of **supply chain** of large companies – “Modern slavery challenges to supply chain management” (Gold, Trautrim, & Trodd, 2015) and “Modern slavery and the supply chain: the limits of corporate social responsibility?” (New, 2015).

Cluster 4 involves publications regarding the relevance and absence of studies about the influence of slavery labour in management practice. Some of these publication are “The denial of slavery in management studies” (Cooke, 2003), “Reflections on the darker side of conventional power analytics” (Willmott, 2013) and ‘Down with Big Brother!’ The End of ‘Corporate Culturalism’? (Fleming, 2013).

In turn, cluster 5 includes publications that focus on modern slavery labour and human exploitation that affect less developed countries due to factors as forced immigration and economic and political crises. The publications include “Modern Slavery as a Management Practice: Exploring the Conditions and Capabilities for Human Exploitation” (Crane, 2013), “Modern day slavery: What drives human trafficking in Europe?” (Hernandez & Rudolph, 2015), and “Liquidity-constrained migrants” (Djajic & Vinogradova, 2014).

5. Conclusion

Studies on the impact of slavery in the History of Management and on the managerial and organizational practices have been neglected.

As some authors claim, various legitimatizes disciplines have contributed to the practice slavery labour and its institutions (Silva 2013, 2014). Since slavery labour had played a fundamental role in the economic and social life of countries in which this practice endured for centuries (USA and Brazil) it is agreeable to analyze the historical and social impact of slavery labor in management.

For this reason, I conducted a bibliometric analysis of publications administration research area that had the theme of slavery, using the mapping technique VOS, using the VOSviewer software.

Findings of co-citation analysis indicate the most used references include History and Economy works. Co-citation analysis also indicates that most of used works deal with the social and economic impact of slavery labour in American society.

The bibliographic analysis indicates that studies on slavery are turning to different perspective. Debates are moving to analysis on contemporary slavery – sexual, child slavery, labor slavery in supply chain – basic levels of supply chain such as supply of raw material – and the relevance of studies on slavery on historic studies.

A limitation of this study is not performing a qualitative analysis of the works presented on the co-citation and bibliographic analysis performed using the VOSviewer. For this reason, I indicate for future studies conducting a systematic review of refereces and publications analyzed in this bibliometric study.

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<https://doi.org/10.1177/1094428114562629>

Appendix 1 – List of publications extracted from WoS clustered according to bibliographic and counting analysis

| Authors | Title | Source | Citations | Cluster |
|---------------------------------|---|----------------------------------|------------------|----------------|
| (Willmott, 1993) | Strength is ignorance - slavery is freedom - managing culture in modern organizations | Journal of management studies | 503 | 4 |
| (domar, 1970) | Causes of slavery or serfdom - hypothesis | Journal of economic history | 200 | 6 |
| (conrad & meyer, 1958) | The economics of slavery in the ante bellum south | Journal of political economy | 147 | 6 |
| (dell, 2010) | The persistent effects of peru's mining mita | Econometrica | 141 | 1 |
| (roth, 2007) | Repugnance as a constraint on markets | Journal of economic perspectives | 133 | 9 |
| (cooke, 2003) | The denial of slavery in management studies | Journal of management studies | 80 | 4 |
| (fenoaltea, 1984) | Slavery and supervision in comparative perspective - a model | Journal of economic history | 78 | 8 |
| (johnson, bardhi, & dunn, 2008) | Understanding how technology paradoxes affect customer satisfaction with self-service technology: the role of performance ambiguity and trust in technology | Psychology & marketing | 46 | |
| (crane, 2013) | Modern slavery as a management practice: exploring the conditions and capabilities for human exploitation | Academy of management review | 41 | 5 |
| (mitchener, mclean, 2003) | The productivity of us states since 1880 | Journal of economic growth | 41 | 1 |

| Authors | Title | Source | Citations | Cluster |
|-------------------------------|---|---------------------------------------|------------------|----------------|
| (eltis,engerman, 2000) | The importance of slavery and the slave trade to industrializing britain | Journal of economic history | 38 | 3 |
| (phillips, 2013) | Unfree labour and adverse incorporation in the global economy: comparative perspectives on brazil and india | Economy and society | 35 | 5 |
| (barzel, 1977) | Economic-analysis of slavery | Journal of law & economics | 34 | 3 |
| (acemoglu, wolitzky, 2011) | The economics of labor coercion | Econometrica | 29 | 1 |
| (chwe, 1990) | Why were workers whipped - pain in a principal-agent model | Economic journal | 29 | 11 |
| (kong, 2006) | What it feels like for a whore: the body politics of women performing erotic labour in hong kong | Gender work and organization | 29 | 2 |
| (carson, 2008) | The effect of geography and vitamin d on african american stature in the nineteenth century: evidence from prison records | Journal of economic history | 28 | 8 |
| (genicot, 2002) | Bonded labor and serfdom: a paradox of voluntary choice | Journal of development economics | 28 | 1 |
| (fogel & engerman, 1971) | Relative efficiency of slavery - comparison of northern and southern agriculture in 1860 | Explorations in economic history | 23 | 6 |
| (jakobsson, & kotsadam, 2013) | The law and economics of international sex slavery: prostitution laws and trafficking | European journal of law and economics | 23 | 5 |

| Authors | Title | Source | Citations | Cluster |
|--------------------------------|---|---|------------------|----------------|
| | for sexual exploitation | | | |
| (solow, 1985) | Caribbean slavery and british growth - the williams,eric hypothesis | Journal of development economics | 23 | 3 |
| (engerman, 1986) | Slavery and emancipation in comparative perspective - a look at some recent debates | Journal of economic history | 22 | 3 |
| (findlay,1975) | Slavery, incentives, and manumission - theoretical model | Journal of political economy | 21 | 3 |
| (galenson, 1981) | White servitude and the growth of black-slavery in colonial america | Journal of economic history | 21 | |
| (jones, 1956) | Slavery in the ancient world | Economic history review | 21 | |
| (lerche, 1995) | Is bonded labor a bound category - reconceptualizing agrarian conflict in india | Journal of peasant studies | 21 | 2 |
| (nuttall & manz, 2008) | A new energy security paradigm for the twenty-first century | Technological forecasting and social change | 21 | 10 |
| (lagerlof, 2009) | Slavery and other property rights | Review of economic studies | 20 | 1 |
| (pritchett, chamberlain, 1993) | Selection in the market for slaves - new-orleans, 1830-1860 | Quarterly journal of economics | 20 | 6 |
| (engerman, 1976) | Some economic and demographic comparisons of slavery in united-states and british-west-indies | Economic history review | 19 | 3 |
| (knights, 2008) | Myopic rhetorics: reflecting epistemologically and ethically on the demand for | Academy of management learning & education | 19 | 4 |

| Authors | Title | Source | Citations | Cluster |
|---|---|------------------------------------|------------------|----------------|
| | relevance in organizational and management research | | | |
| (yeoman & mars, 2012) | Robots, men and sex tourism | Futures | 19 | 4 |
| (fleming, 2013) | 'Down with big brother!' the end of 'corporate culturalism'? | Journal of management studies | 18 | 4 |
| (acemoglu, garcia-jimeno, & robinson, 2012) | Finding eldorado: slavery and long-run development in colombia | Journal of comparative economics | 18 | 1 |
| (aufhauser, 1973) | Slavery and scientific management | Journal of economic history | 18 | 3 |
| (lebaron & ayers, 2013) | The rise of a "new slavery"? Understanding african unfree labour through neoliberalism | Third world quarterly | 18 | 5 |
| (sacerdote, 2005) | Slavery and the intergenerational transmission of human capital | Review of economics and statistics | 18 | 1 |
| (field, 2008) | The relative efficiency of slavery revisited - a translog production function-approach | American economic review | 17 | |
| (hu & shapley, 2003) | On authority distributions in organizations: controls | Games and economic behavior | 17 | |
| (rosefelde, 1981) | An assessment of the sources and uses of gulag forced labor 1929-56 | Soviet studies | 17 | |
| (cole, 2005) | Capitalism and freedom: manumissions and the slave market in louisiana, 1725-1820 | Journal of economic history | 16 | 6 |

| Authors | Title | Source | Citations | Cluster |
|-----------------------------|--|------------------------------------|------------------|----------------|
| (grubb, 1992) | Fatherless and friendless - factors influencing the flow of english emigrant servants | Journal of economic history | 16 | 9 |
| (hanes, 1996) | Turnover cost and the distribution of slave labor in anglo-america | Journal of economic history | 16 | 7 |
| (walker, 1986) | Racism, slavery, and free-enterprise - black entrepreneurship in the united-states before the civil-war | Business history review | 16 | 7 |
| (yeager, 1995) | Encomienda or slavery? The spanish crown's choice of labor organization in sixteenth-century spanish america | Journal of economic history | 16 | 1 |
| (crown & wheat, 1995) | State per-capita income convergence since 1950 - sharecroppings demise and other influences | Journal of regional science | 15 | 1 |
| (irwin, 1988) | Exploring the affinity of wheat and slavery in the virginia piedmont | Explorations in economic history | 15 | 9 |
| (reedy & learmouth, 2011) | Death and organization: heidegger's thought on death and life in organizations | Organization studies | 14 | 4 |
| (fourie & van zanden, 2013) | Gdp in the dutch cape colony: the national accounts of a slave-based society | South african journal of economics | 14 | 1 |
| (wright, 1975) | Slavery and cotton boom | Explorations in economic history | 14 | 6 |
| (denhardt, 1987) | Images of death and slavery in organizational life | Journal of management | 13 | 4 |

| Authors | Title | Source | Citations | Cluster |
|------------------------------|---|---|------------------|----------------|
| (clarke, 1998) | Trade unions and the nonpayment of wages in russia | International journal of manpower | 13 | |
| (djajic & vinogradova, 2013) | Undocumented migrants in debt | Labour economics | 13 | 5 |
| (engerman, 1967) | Effects of slavery upon southern economy - review of recent debate | Explorations in entrepreneurial history | 13 | 6 |
| (stevens, 2004) | The ethics of the us business executive: a study of perceptions | Journal of business ethics | 13 | |
| (wheatcroft, 1983) | Towards a thorough analysis of soviet forced labor statistics | Soviet studies | 13 | |
| (grubb & stitt, 1994) | The liverpool emigrant servant trade and the transition to slave labor in the chesapeake, 1697-1707 - market adjustments to war | Explorations in economic history | 12 | 9 |
| (mittal & weingast, 2011) | Self-enforcing constitutions: with an application to democratic stability in america's first century | Journal of law economics & organization | 12 | 7 |
| (austin, 2007) | Labour and land in ghana, 1874-1939: a shifting ratio and an institutional revolution | Australian economic history review | 11 | 1 |
| (darity, 1992) | A model of original sin - rise of the west and lag of the rest | American economic review | 11 | 3 |
| (draper, 2008) | The city of london and slavery: evidence from the first dock companies, 1795-1800 | Economic history review | 11 | 10 |

| Authors | Title | Source | Citations | Cluster |
|--|---|----------------------------------|------------------|----------------|
| (engerman, 1984) | Economic-change and contract labor in the british caribbean - the end of slavery and the adjustment to emancipation | Explorations in economic history | 11 | 3 |
| (pennington, ball, hampton, & soulakova, 2009) | The cross-national market in human beings | Journal of macromarketing | 11 | 5 |
| (coulomb, 1998) | Adam smith: a defence economist | Defence and peace economics | 10 | |
| (evers, 2006) | Expropriated from the hereafter: the fate of the landless in the southern highlands of madagascar | Journal of peasant studies | 10 | |
| (fleischman, oldroyd, tyson, & 2011) | Plantation accounting and management practices in the us and the british west indies at the end of their slavery eras | Economic history review | 10 | 10 |
| (frantz, 2013) | Jordan's unfree workforce: state-sponsored bonded labour in the arab region | Journal of development studies | 10 | 5 |
| (mann, 2001) | The state, race, and 'wage slavery' in the forest sector of the pacific north-west united states | Journal of peasant studies | 10 | 3 |
| (meynhardt, chandler, & strathoff, 2016) | Systemic principles of value co-creation: synergetics of value and service ecosystems | Journal of business research | 10 | |
| (rose, 1989) | Biological consequences of segregation and economic deprivation - a post-slavery population | Journal of economic history | 10 | |

| Authors | Title | Source | Citations | Cluster |
|------------------------------|---|---|------------------|----------------|
| | from southwest arkansas | | | |
| (satz, 2003) | Child labor: a normative perspective | World bank economic review | 10 | 2 |
| (ruef & harness, 2009) | Agrarian origins of management ideology: the roman and antebellum cases | Organization studies | 9 | 4 |
| (craemer, 2009) | Framing reparations | Policy studies journal | 9 | 10 |
| (djajic & vinogradova, 2014) | Liquidity-constrained migrants | Journal of international economics | 9 | 5 |
| (fenske, 2012) | Land abundance and economic institutions: egba land and slavery, 1830-1914 | Economic history review | 9 | 1 |
| (kapadia, 1995) | The profitability of bonded labor - the gem-cutting industry in rural south-india | Journal of peasant studies | 9 | 2 |
| (saraydar, 1964) | A note on the profitability of ante bellum slavery | Southern economic journal | 9 | 7 |
| (breman, 2010) | Neo-bondage: a fieldwork-based account | International labor and working-class history | 8 | 2 |
| (fuente, 2010) | From slaves to citizens? Tannenbaum and the debates on slavery, emancipation, and race relations in latin america | International labor and working-class history | 8 | 10 |
| (fatton, 2006) | Haiti: the saturnalia of emancipation and the vicissitudes of predatory rule | Third world quarterly | 8 | 11 |

| Authors | Title | Source | Citations | Cluster |
|--------------------------------------|---|---------------------------------------|------------------|----------------|
| (field, 1988) | Free and slave labor in the antebellum south - perfect substitutes or different inputs | Review of economics and statistics | 8 | 8 |
| (irwin, 1994) | Explaining the decline in southern per-capita output after emancipation | Explorations in economic history | 8 | |
| (robinson, 2002) | Race, gender, and familial status: discrimination in one us mortgage lending market | Feminist economics | 8 | 2 |
| (rosefelde, 1987) | Incriminating evidence - excess deaths and forced labor under stalin - a final reply to critics | Soviet studies | 8 | |
| (willmott, 2013) | Reflections on the darker side of conventional power analytics | Academy of management perspectives | 8 | 4 |
| (aufhauser, 1974) | Slavery and technological change | Journal of economic history | 7 | 3 |
| (conquest, 1982) | Forced labor statistics - some comments | Soviet studies | 7 | |
| (fenoaltea, 1981) | The slavery debate - a note from the sidelines | Explorations in economic history | 7 | 11 |
| (hernandez & rudolph, 2015) | Modern day slavery: what drives human trafficking in europe? | European journal of political economy | 7 | 5 |
| (mancall, rosenbloom, & weiss, 2002) | Agricultural labor productivity in the lower south, 1720-1800 | Explorations in economic history | 7 | 7 |

| Authors | Title | Source | Citations | Cluster |
|-------------------------------|---|----------------------------------|------------------|----------------|
| (van der linden, 2010) | Re-constructing the origins of modern labor management | Labor history | 6 | 4 |
| (berlan, 2013) | Social sustainability in agriculture: an anthropological perspective on child labour in cocoa production in ghana | Journal of development studies | 6 | |
| (bertocchi & dimico, 2014) | Slavery, education, and inequality | European economic review | 6 | |
| (bertocchi & dimico, 2012) | The racial gap in education and the legacy of slavery | Journal of comparative economics | 6 | 1 |
| (brass, 2014) | Debating capitalist dynamics and unfree labour: a missing link? - response to a special section on "dynamics of unfree labour in the contemporary global economy" guest edited by stephanie barrientos, uma kothari and nicola phillips | Journal of development studies | 6 | 2 |
| (burity, 2008) | Brazil's rise: inequality, culture and globalization | Futures | 6 | |
| (dougherty & heckelman, 2008) | Voting on slavery at the constitutional convention | Public choice | 6 | 7 |
| (ellerman, 1999) | The democratic firm: an argument based on ordinary jurisprudence | Journal of business ethics | 6 | 3 |
| (engerman, 2003) | Slavery, freedom, and sen | Feminist economics | 6 | 2 |

| Authors | Title | Source | Citations | Cluster |
|----------------------------------|---|--|------------------|----------------|
| (fogel, 1975) | 3 phases of cliometric research on slavery and its aftermath | American economic review | 6 | 6 |
| (gold, trautrims, & trodd, 2015) | Modern slavery challenges to supply chain management | Supply chain management-an international journal | 6 | 2 |
| (mani, agrawal, & sharma, 2015) | Social sustainability in the supply chain: analysis of enablers | Management research review | 6 | 2 |
| (miller, 1981) | The fabric of control - slavery in antebellum southern textile mills | Business history review | 6 | 7 |
| (new, 2015) | Modern slavery and the supply chain: the limits of corporate social responsibility? | Supply chain management-an international journal | 6 | 2 |
| (shilliam, 2012) | Forget english freedom, remember atlantic slavery: common law, commercial law and the significance of slavery for classical political economy | New political economy | 6 | 2 |
| (starr, 1958) | An overdose of slavery | Journal of economic history | 6 | 11 |
| (weiman, 1991) | Peopling the land by lottery - the market in public lands and the regional differentiation of territory on the georgia frontier | Journal of economic history | 6 | 9 |

Appendix 2 – List of the analyzed cocitations clustered according to network analysis

| Authors | Title | Type of Publication | Citations | Cluster |
|----------------------------|--|----------------------------|------------------|----------------|
| (Fogel & Engerman, 1974b) | Time on the Cross: The Economics of American Slavery | Book | 57 | 1 |
| (Conrad & Meyer, 1958) | The Economics of Slavery in the Ante Bellum South | Article | 26 | 1 |
| (Fogel & Engerman, 1980) | Explaining the Relative Efficiency of Slave Agriculture in the Antebellum South: Reply | Article | 19 | 1 |
| (Ransom & Sutch, 1977) | One Kind of Freedom: The Economic Consequences of Emancipation | Book | 19 | 1 |
| (Wright, 1978) | The Political Economy of the Cotton South: Households, Markets, and Wealth in the Nineteenth Century | Book | 16 | 1 |
| (Starobin, 1970) | The Economics of Industrial Slavery In the Old South | Article | 15 | 1 |
| (North, 1961) | Economic growth of the United States, 1790-1860 | Book | 9 | 1 |
| (Anderson & Gallman, 1977) | Slaves as Fixed Capital: Slave Labor and Southern Economic Development | Article | 7 | 1 |
| (Easterlin, 1961) | Regional Income Trends, 1840-1950 in S. Harris (Ed) American Economic History | Book | 7 | 1 |
| (US. Bureau, 1975) | Bicentennial Edition: Historical Statistics of the United States, Colonial Times to 1970 September 1975 | Book | 7 | 1 |
| (Gallman, 1970) | Self-Sufficiency in the Cotton Economy of the Antebellum South | Article | 6 | 1 |
| (Higgs, 1977) | Competition and Coercion Blacks in the American economy 1865-1914 | Book | 6 | 1 |
| (Kotlikoff, 1979) | THE STRUCTURE OF SLAVE PRICES IN NEW ORLEANS, 1804 TO 1862 | Article | 6 | 1 |
| (Passell & Wright, 1972) | The Effects of Pre-Civil War Territorial Expansion on the Price of Slaves | Article | 5 | 1 |
| (Yasuba, 1961) | The Profitability and Viability of Plantation Slavery in the United States | Article | 5 | 1 |
| (Acemoglu et al., 2001) | The Colonial Origins of Comparative Development: An Empirical Investigation | Article | 9 | 2 |
| (Acemoglu et al., 2002) | Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution | Article | 9 | 2 |

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|-------------------------------|--|---------|----|---|
| (Nunn, 2008) | The Long-term Effects of Africa's Slave Trades | Article | 7 | 2 |
| (Sokoloff & Engerman, 2000) | Institutions, Factor Endowments, and Paths of Development in the New World | Article | 7 | 2 |
| (Dell, 2010) | The Persistent Effects of Peru's Mining Mita | Article | 6 | 2 |
| (Galor et al., 2009) | Inequality in Landownership, the Emergence of Human-Capital Promoting Institutions, and the Great Divergence | Article | 6 | 2 |
| (Lagerlof, 2009) | THE STRUCTURE OF SLAVE PRICES IN NEW ORLEANS, 1804 TO 1862 | Article | 6 | 2 |
| (MitchenerIan & McLean, 2003) | The Productivity of US States since 1880 | Article | 6 | 2 |
| (Hall & Jones, 1999) | Why do Some Countries Produce So Much More Output Per Worker than Others? | Article | 5 | 2 |
| (Nunn & Wantchekon, 2011) | The Slave Trade and the Origins of Mistrust in Africa | Article | 5 | 2 |
| (Fogel, 1989) | Without Consent or Contract: The Rise and Fall of American Slavery (Norton Paperback) | Book | 21 | 3 |
| (Williams, 1944) | Capitalism and Slavery | Book | 12 | 3 |
| (Fleischman & Tyson, 2004a) | Accounting in service to racism: monetizing slave property in the antebellum South | Article | 9 | 3 |
| (Cooke, 2003) | The Denial of Slavery in Management Studies | Article | 8 | 3 |
| (Fleischman & Tyson, 2004b) | Accounting in service to racism: monetizing slave property in the antebellum South | Article | 7 | 3 |
| (Foner, 1988) | Reconstruction: America's Unfinished Revolution, 1863 - 1877 | Book | 7 | 3 |
| (Blackburn, 1997) | The Making of New World Slavery | Book | 5 | 3 |
| (Fraginals et al., 1983) | The Level and Structure of Slave Prices on Cuban Plantations in the Mid-Nineteenth Century: Some Comparative Perspectives | Article | 5 | 3 |
| (Oldroyd et al., 2008) | The culpability of accounting practice in promoting slavery in the British Empire and antebellum United States. Critical Perspectives on Accounting 19(5): 764-784.' | Article | 5 | 3 |

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|---------------------------|---|---------|----|---|
| (Domar, 1970) | The Causes of Slavery or Serfdom: A Hypothesis | Article | 18 | 4 |
| (Wright, 1986) | Old South, New South: Revolutions in the Southern Economy since the Civil War | Book | 12 | 4 |
| (Fogel & Engerman, 1974a) | Philanthropy at Bargain Prices: Notes on the Economics of Gradual Emancipation | Article | 9 | 4 |
| (Curtin, 1969) | The Atlantic Slave Trade - A Census | Book | 8 | 4 |
| (Galenson, 1981) | White Servitude and the Growth of Black Slavery in Colonial America | Article | 8 | 4 |
| (McCusker & Menard, 1985) | The Economy of British America, 1607-1789 | Book | 8 | 4 |
| (Engerman, 1983) | Contract Labor, Sugar, and Technology in the Nineteenth Century | Article | 5 | 4 |
| (Galenson, 1984) | The Rise and Fall of Indentured Servitude in the Americas: An Economic Analysis | Article | 5 | 4 |
| (Morgan, 1975) | American Slavery, American Freedom | Book | 5 | 4 |
| (Fenoaltea, 1984) | Slavery and Supervision in Comparative Perspective: A Model | Article | 12 | 5 |
| (Patterson, 1982) | Slavery and Social Death: A Comparative Study | Book | 10 | 5 |
| (Findlay, 1975) | Slavery, Incentives, and Manumission: A Theoretical Model | Article | 9 | 5 |
| (Barzel, 1977) | An Economic Analysis of Slavery | Article | 8 | 5 |
| (Genovese, 1974) | Roll, Jordan, Roll: The World the Slaves Made | Book | 8 | 5 |
| (Bergstrom, 1971) | On the Existence and Optimality of Competitive Equilibrium for a Slave Economy | Article | 7 | 5 |
| (Austin, 2005) | Labour, Land and Capital in Ghana: From Slavery to Free Labour in Asante, 1807-1956 (Rochester Studies in African History and the Diaspora) | Book | 6 | 6 |
| (Brass, 1999) | Towards a Comparative Political Economy of Unfree Labour: Case Studies and Debates. | Book | 6 | 6 |
| (Klein, 1998) | Slavery and Colonial Rule in French West Africa (African Studies) | Book | 6 | 6 |
| (Genicot, 2002) | Bonded labor and serfdom: a paradox of voluntary choice | Article | 5 | 6 |
| (Getz, 2004) | Slavery and Reform in West Africa: Toward Emancipation in Nineteenth-Century Senegal and the Gold Coast | Book | 5 | 6 |

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|----------------|---|---------|---|---|
| (Lerche, 2007) | A Global Alliance against Forced Labour? Unfree Labour, Neo-Liberal Globalization and the International Labour Organization | Article | 5 | 6 |
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