

SCOTTISH JOURNAL OF  
ARTS, SOCIAL SCIENCES  
AND  
SCIENTIFIC STUDIES

---

---

VOLUME 7, ISSUE II  
JANUARY, 2013

**Articles**

---

<b>A Case Study of IT Outsourcing in Southeast Asia</b>	<b>2</b>
<i>Supaporn Kupimai</i>	2
<i>Terawat Piboongunon, Ph.D</i>	2
<b>Effects of Organization Performance on Share Price: an Empirical Study of the Top Performing Manufacturing Companies Listed on Nigeria Stock Exchange</b>	<b>15</b>
<i>Fagbemi Ayodele Omoyiola Ph. D</i>	15
<i>Abata Matthew Adeolu Ph. D</i>	15
<b>An Appraisal of Absolutism, Relativism and Tolerance</b>	<b>26</b>
<i>J. O. Fasoro, Ph.D</i>	26
<b>The Effects of Various Teaching Methods on Learning New L2 Vocabulary</b>	<b>36</b>
<i>Gülay Bedir</i>	36
<i>Sevgi Bektaş Bedir</i>	36
<b>Long Run Macroeconomic Determinants of Public Capital Spending in Nigeria</b>	<b>46</b>
<i>Benjamin Ayodele Folorunso (Ph.D)</i>	46
<b>Psychic Imbalance In The Middle-Class West Indian: Edgar Mittleholzer's <i>Corentyne Thunder</i></b>	<b>65</b>
<i>Julia Udofia, Ph.D</i>	65
<b>Grounded Theory Method with a Historical Dataset</b>	<b>71</b>
<i>Jari Metsämuuronen</i>	71

# A Case Study of IT Outsourcing in Southeast Asia

---

**Supaporn Kupimai**

*Department of Faculty of Business Administration  
Rajamangala University of Technology Thanyaburi Thailand  
Email: [skupimai@yahoo.com](mailto:skupimai@yahoo.com)*

**Terawat Piboongunon, Ph.D**

*Department of Mobile Information Technology Department  
TOT PCL., Thailand*

## **Abstract**

In this paper we review and investigate of information technology (IT) Outsourcing and Information Technology (IT) outsourcing in Southeast Asia. Development of IT in each country in Southeast Asia is relatively new to the management of IT outsourcing relationships. However, the level of experience depends on the government's visions and policies of each country. This article aims to understand the fundamentals of IT Outsourcing and the ability of countries in Southeast Asia to prepare for the ASEAN Economic Community (AEC).

**Keywords:** Information Technology (IT) outsourcing, IT outsourcing relationships, Management of IT outsourcing relationships, AEC (ASEAN Economic Community).

## Introduction

Outsourcing of information systems (IS) has been widely recognized since the mid-1980s, it has grown steadily in recent years. Outsourcing is not a new concept however; it has become increasingly essential in modern business. Changing in business environment, including of reducing the process of globalization and increasing competitions has increased the need for companies to find new ways to survive and prosper. (Spathis and Constantinides 2004). Information technology innovations that meet the needs of these companies have changed. Efforts to achieve sustainable competitiveness through a commitment made in the scope and complexity of the organization is growing. (Attewell and Rule, 1984). Many organizations try to solve this problem by increasing the investment in hardware and human resources, only to face the bombing as an expense and not able to catch up with rapidly changing information technology. The company decided to outsource some or the entire often cited one or more strategic intents for the hiring decision. However, many researchers say there is still widespread uncertainty and risks associated with the added benefit of outsourcing. (Lacity and Willcocks, 1998, Smith et al., 1998, Aubert et al., 2004, Earl, 1996). Information technology (IT) outsourcing is a subclass of outsourcing. The definition of IT outsourcing that is described by Lacity and Willcocks (2006a, p.1), "the handing over of IT-related assets, resources, activities and/or people to third party management to achieve agreed performance outcomes". Several companies will find that as IT merges into the general business infrastructure, mitigating risk becomes more important than pursuing innovation, and reducing cost takes precedence over making new investments. Success, in other words, hinges more on defense than offense (Carr 2004).

IT Outsourcing has become a smarter and more affordable for many businesses looking to save money. It is a way to take advantage of the expertise of professionals without the usual cost. Although the concept of intent such as reducing costs and improving quality of access to expertise and flexibility of the organization and the ability to focus on core competencies do they need to be weighed against the risks created by the outsourcing vendor rather than seizing the opportunity, loss of control increasing costs, regulatory and technological strengths. (Beasley et al., 2004; Aubert et al., 1998). Therefore, the decision to outsource is the ultimate goal of influencing the company's profits through the strategic decision to weigh the costs and benefits made by its management.

The main advantage of using IT outsourcing is not just a specialist provider of IT outsourcing in the IT business, but they can provide and utilize IT resources and technical means to access new skills and expertise is generally faster than the in-house IT department, some service providers have to provide their services to many companies around the world. (Sparrow, 2003)

ASEAN Economic Community (AEC) has agreed to liberalize trade in services and trade in goods and services are key to the 11 pilot areas for the promotion of employment or production. Raw materials and parts manufactured in other Asian countries. Below is a plan for moving towards an ASEAN Economic Community and was assigned to various countries. Coordinator is responsible for Burma's main responsibility is to the agricultural and fisheries products. Malaysia is responsible for the manufacture of rubber products and textiles and apparel. Indonesia is responsible for automobiles and products of wood used. The Philippines is responsible for the field of

electronics. Singapore is responsible for information technology (e-ASEAN) and health care.

Business services, telecommunications and computers is one of the four branches of the industry to accelerate the liberalization in 2558 under the Agreement on the ASEAN Economic Community (AEC) was established in the liberalization of service sectors of telecommunications and computer format.

Table 1. The liberalization of service sectors of telecommunications and computer format.

Service sectors	Types of Service
Cross-border	A provider services to the country's borders. The provider remain in own country or invest in the business of providing customer service via the Internet such as listen to music online and games online etc.
Consumption abroad	A service provider is in the country's borders. The customer is traveling from own country to the country of service providers such as the service offered by mobile operators in abroad country.
Commercial Presence	The service providers invest or establish joint venture (partnership) to provide customer service countries such as the investment company to provide mobile communications services in Thailand, etc.
Presence of Natural Person	A personal service to all professionals working in different services on abroad. In example, the experts in development of applications from foreign arrive to work in Thailand, etc.

Trade liberalization will affect ICT outsourcing course, there are only five of the areas highlighted by the two theories is important in building the competitiveness of the software (Heeks & Nicholson, 2002; Carmel, 2003a) as following

1. Government vision and policy: the local government promotes growth in global telecommunications and foreign investments by decreasing software tariffs and taxes.
2. Information and Communication Technology (ICT) industry's global maturity: the number of local firms, sizes, and associations that inspire the software industry's standards.
3. Information and Communications Technology (ICT): the local technologies are advanced and affordable enough to allow for cross-continent communications.
4. Wages: the local wages are competitive enough to attract foreign clients.
5. Human Capital: the local IT work force is competitive in size, productivity, and education in comparison to other IT off-shoring locations.

In this paper, we review and study of an Information Technology (IT) outsourcing and developments of an Information Technology (IT) outsourcing in Southeast Asian countries. The development of business in IT in Southeast Asian countries is relatively inexperienced with the management of IT outsourcing relationships. However, the level

of experience depends on government vision and policy of each country. This article aims to provide a better understand the fundamentals of IT outsourcing and capabilities of ASIAN countries to preparing for the AEC (ASEAN Economic Community).

### **Literature Review**

In this section, we review the study of management factor and service factor of success IT Outsourcing. IT is changing so rapidly that many companies plan to manage their resources and extend the use of modern technology. If businesses do everything they own, they will have to spend funds for academic achievement. Employment trends have also increased elsewhere in Western Europe and in North America and parts of Southeast Asia, including Japan. Growth is concerned, especially the period of economic downturn on IT outsourcing is seen as a way to contain costs, companies are trying to reduce IT spending and conversion costs, unpredictable, a fixed cost. (Sparrow, 2003, pp. 5).

Early, there are many researches that described IT Outsourcing in may topics such as Rouse A. C., Corbitt B. J. Aubert B. A. (2001); “The success of outsourcing is not a one-dimensional. It has many dimensions. It also established the extent to which the respondents were satisfied with their employment is largely a function provided by the supplier and the customer service is a strategic advantage”. Koh, Ang, and Straub (2004) examined the psychological contract between outsourcing customers and suppliers, an alternative approach that would focus uniquely on both parties' perspectives. Jurison, 1995, Quinn & Hilmer, 1994 and Sobol & Apte, 1995 said that the reasons for corporations outsourcing their IS functions usually include cost savings, access to expertise and new technologies, a decrease in IS professional recruitment, flexibility in managing IS resources and an increase in capital utilization.

The dominant research has acknowledged that contractual mechanisms and strategic partnerships complement each other, with the legal contract providing the context in which the relationship exists and defines the interactions between parties (Saunders et al. 1997). The management of IT outsourcing continues to challenge organizations today, despite its widespread diffusion over the years (Ang and Straub 1998, Levina and Ross 2003, Hu et al. 1997). IT Outsourcing suggests a variety of IT services. In Weill and Vitale research (Weill & Vitale, 2001) there is a list of the seventy IT infrastructure services needed for e-business. It consists of nine categories as follows.

#### **A. Applications Infrastructure**

Infrastructure services

- Internet access for employees
- Development of e-mail
- Applications management for e-business (common standards)
- Service payment transactions (Electronic funds transfer), etc.

#### **B. Communications Management**

Communications Management services

- Communication networks services
- Electronic data exchange with suppliers and clients of the firm
- Electronic support of group work, etc.

### **C. Data Management**

Data Management services

- Management key information regardless of application
- Consultation on data management
- Information storage, etc.

### **D. IT Management**

IT Management services

- Tools for mass data processing
- Information systems project management
- Service Level Agreement, etc.

### **E. Security**

Security services

- Information system security policy
- Recovery planning for business applications in case of failure, etc.

### **F. Architecture and Standards**

Architecture and Standards services

- Development of data standards (communication standards, application standards, operation standards)
- Application of 1 data standards (communication standards, application standards, operation standards) etc.

### **G. E-Channel Management**

E-Channel Management services

- E-shop
- Web-sites
- Mobile communication, etc.

### **H. IT Research and Development**

IT Research and Development services

- Identifying and testing new technologies for business
- Evaluation of proposals to introduce new information systems

### **I. IT Education and Training**

IT Education and Training services

- Training and using IT
- Executive management training for value creation using IT

IT Outsourcing Services is a standard strategy of streamlining and integrating business functions and business processes to improve efficiency and effectiveness. Effective strategy is a successful fit between environment and organizational factors. (Drazin and Van de Ven, 1985). When companies decide to outsource their IS operations to external service providers, they need to consider many factors related to their business environment and organizational characteristics (Teng et al., 1995). Hafeez-Baig and Gururajan (2011) examined the issues associated with the process of IS/IT outsourcing from the perspective of both the parties (service provider and services receivers) in the dynamic business environment.

In practice, the benefits of IT outsourcing is likely to spread throughout the downside potential for outsourcing, such as loss control services to the lack of flexibility in providing services that have been damaged. The morale of the staff or the culture clash between providers and customers, and the distraction of having to manage relationships with providers of services to customers who have examined the program's functions. The operation to assess how the organization will achieve increased efficiency and value-added services and enhance the performance of services that meet or exceed the expectations of customers about the features and performance. (Craswell et al., 1995).

### **IT Outsourcing in Asian**

The global services market is highly dynamic environment and selecting the best outsourcing location for your operation can have a significant long-term impact. [<http://www.sourcingline.com>] has compiled the most comprehensive online database of outsourcing country statistics. In this paper, we summarize that the previous papers and represent as follow.

**Indonesia** is the largest economy in Southeast Asia is a member of the G-20 major economies and the countries of Southeast Asia's only OPEC. The heavy influence of the Indonesian market economy; with more than 164 enterprises under its management. Today the country is moving away from dependence on exports and restructuring strategies to meet the challenges of the economy driven by IT and IT-related services. Many economists expect a growth of USD \$ 700m last year (2011), with a compound annual growth rate (CAGR) of around 15% over 2010-2014, while the IT services market in Indonesia has grown some. Most of these are concentrated in the services, including systems integration, professional services, training support services and global sourcing. One of the most basic elements of the remuneration paid to employees. This will determine the cost competitiveness of countries in the areas of information technology. High-level resources are more limited and there is a shortage of high caliber professionals to narrow the cost difference compared with the United States.

Salary for the IT project manager with ten to twenty years of experience, often 29 percent of the average 203 million rupiah or USD \$ 29,400 Project management is another important factor in the cost of the country in IT. the world is still relatively scarce. Salaries in the BPO space with a junior and non-voice data, there are about 13 percent of their U.S. partners. Senior staff is highly skilled and BPO operations managers about the order of 23 percent of their American colleagues. Indonesia has the fourth largest in the world next to China, India, and the United States. Exports of IT services with a low of USD \$ 121,000,000, compared with China's \$ 6.3 billion and India \$ 49 billion, simplicity and speed up the enforcement of contracts is desirable in the operation of offshore outsourcing. Procedure will take time to enforce the contract in Indonesia takes 40 steps laid out in the bottom half of the survey. It only takes about 570 days to complete the process as compared to India (1420 days), Pakistan (976 days) and Philippines (842 days), software piracy in the country. It has a rate of 86 percent, compared with China, India and the Philippines.

**Malaysia** has ranked the highest. "Business environment that allows" and the country's economy is driven largely by the work ahead of other markets, especially in India, China, Poland, and the Philippines. In June 2010, the Malaysian government plans. It is intended to make reforms to the services sector to attract more direct foreign investment. Outsourcing industry in Malaysia is growing because of government support of industry expertise in BFSI domain knowledge and logistics, oil and gas. It offers a variety of cultures and languages. Strengths are also interested in the business of marketing, Asia, Southeast Asia and the Middle East. Major advances have occurred in the industry as well as the inclusion of five Malaysian outsourcing companies in Global Services 100 list; the ability to drive the IT or IT enabled service providers around the world. To increase foreign investment, the current political administration is to review the policies enacted under the New Economic Policy of 1970, which will be added to decrease the export of consumer goods in the global economic slowdown. Malaysia has about 40,000 employees in employment, compared with 1.5 million people employed in India. Malaysia is a booming service sector economy shifted from manufacturing to the rapidly expanding economy based on education and services. Malaysia benefits from its strategic location. Integrated world class and well educated staff of Although India is a leading provider of outsourcing services, Malaysia is on the second floor of outsourcing to countries like China and the Philippines. The country's infrastructure is a critical component in the decision to set up. The provisions of infrastructure projects in Malaysia are rated among the highest in the world with the quality of roads and electricity for the street.

**Philippines** is a country that is the market leader in outsourcing (BPO) services, both in and outside the center of the sound. It is an emerging player in the market for IT services (web design, software development, maintenance programs, etc.) with its focus on specific groups, such as animation. Figures clearly show these facts: In 2006, the Philippine Overseas Employment (IT and BPO) is about \$3.3 billion and has grown to more than 30 % per year to assess \$9 billion in 2009, outsourcing industry in the Philippines first. Early in 1990, but began to grow strongly in the beginning of this decade. As the end of this month as 2004, industry was only about \$1.5 billion, but grew to almost 50% for many years and is estimated now to have been growing at about 30% and will reach \$ 9 billion in 2009, initially focused on the center and the low-BPO added, but growth over the last few years has centered on higher value activities such as web



design, development software animation, legal services, medical transcription services and other shared many years of employment in the capital city of Manila. However, there is significant growth in secondary cities such as Cebu City, Pasig City, Quezon City and Mandaluyong City. The Philippines is one of the places that are most cost effective for IT (web design, development software, movies, etc.) and BPO (voice and sound) of the cost of compensation for personnel costs. the core of any action that can be outsourced to ten to one in five in the United States.

**Singapore** It is an ideal location for setting up the implementation of global sourcing. With its warm business environment, infrastructure quality and proximity to customers in Asia, it's no surprise that the supply is growing at a significant rate, U.S. Department of Commerce ranked Singapore in the outsourcing market as two of the fastest growing worldwide. Singapore is home to international organizations around the world, including Citibank, Credit Suisse First Boston, Hewlett-Packard, IMB and Microsoft-quality high-end environment of Singapore and the costs low. In the streets of Singapore in some of the best in the world, as well as power supply - the index is higher than the U.S.

**Thailand**, a famous tourist destination and auto-making centre, is fast becoming a dominant player in the information technology industry. It ranks sixth among the top outsourcing countries this year alone, despite limited or lacking infrastructure, government support, privacy regulations/security, and ICT research facilities in the country today. As a strategy to focus on building information infrastructure, good governance, and technological policy, Thailand launched its first information technology policy called the IT 2000 in 1996. The National IT Policy was the second phase of the project. It covers a period of ten years, and its main goals are to increase the number of knowledge workers and knowledge-based industries in five key areas: e-Society, e-Education, e-Industry, e-Commerce, and e-Government. Thailand's IT and BPO industries have managed to survive and stay afloat in the economy, despite the obstructions. Most of these industries are concentrated in the fields of database management outsourcing, COBOL programming, animation or digital content sourcing, medical, and biometric-related services. Thailand is slowly building itself to become one of the world's top three countries for outsourcing by the year 2013. Its government plans to build a four-billion-baht industry led by outsourcing industries, such as the Thai IT Outsourcing Association, or TITO. This association is a collaboration of ten leading international outsourcing companies in the country today. Despite these actions, Thailand has yet to make a full and dynamic economic recovery to regain the confidence of its consumers and business investors. Although Thailand has admirably held the outsourcing / offshore industry well, its economy has not reached its fullest potential yet due to the continuing political instability that is plaguing the country in the past few years.

Thailand is now dedicated to support the national evolution toward a knowledge-based economy. They are now developing their human resources to increase the country's competitiveness in the areas of technology and innovation, worker competencies, and fuel efficiency for its automotive policies. A significant component of any outsourcing venture is employee compensation. A typical outsourcing project usually includes several junior resources, experienced senior supervision, and operations management. The most number of cost savings for a company are usually from the junior resources, and Junior Software Engineers or Web Developers with one to four years experience in Thailand are about 18.5% of their American colleagues. The average annual salary is THB 331,470

baht or to \$140,935 USD. IT Project Managers with ten to twenty years of experience are 34.6% in comparable resources to the US. The salary averages to THB 1.08 million, roughly USD \$35,000. The costs for junior resources are crucial for large BPO operations. This is true for Thailand as well, where the salaries in junior non-voice are about 18.7 percent of US resources. Skilled BPO manpower is 35.7% comparable to US resources, while Operations Manager is 61% of US. Its total offshore outsourcing in IT and BPO is \$200 million USD, with exports in miscellaneous business services amounting to \$6,906.40 million.

In Thailand, IS outsourcing is a relatively new but fast-growing phenomenon. Until the mid 1980s, Thailand firms outsourced only specific applications development projects. They were reluctant to consider large-scale Information system (IS) outsourcing projects due to the potential exposure of confidential information and lack of reliable Information system service providers. In the late 1980s, however, the conglomerate groups in Thailand began to integrate the IS departments of their affiliated firms into an in-house Information system (IS) company. This trend suggests first of all that the large groups in Thailand recognized the importance of the IS service business; the strategy also indicates a perception that the quality of Information system (IS) service will improve with the economies of scale resulting from such integration. In this way, the affiliated firms in Thailand tended to outsource their entire Information system operations to their in-house Information system company.

**Vietnam** is the great potential to become a hot IT outsourcing. It has been endorsed by some of the leading companies in the world, including Intel, which generated \$ 1 billion chip plant in U.S. Sector in Vietnam, will benefit from cost increases and the increase in the business environment in China BPO resources in Vietnam, the big savings available resources, Jr., who has less experience than One year there were only 23 percent of the salary of their U.S. counterparts. Higher skilled resources with experience in the collection of payroll to 32 percent of U.S. wages. In Vietnam, foreign investment in Vietnam in the late 1980s, the country's transition from a closed to a market economy (Ralston, Nguyen, & Napier, 1999; Curry, 2001; Gallagher & York, 2004) during the period 1980 to 1990, the study estimated that \$ 17 billion U.S. dollars in capital. In a small proportion of five to ten years ago the number was increased to \$4.55 billion (Glewwe, Gragnolati & Zaman, 2000).

The information on the 2010 ITU Internet Access of Thailand under the ASEAN countries, Brunei, Vietnam and the Philippines after the Mobile Broadband, we are led to Laos, Myanmar and Vietnam. In e-Government ranking we are 74th in the world and is ranked fourth in ASEAN after Singapore and Malaysia. In global Outsourcing of 2011, we ranked seventh in the world reduced from 4 in 2009, followed by Malaysia and Indonesia. The interest is higher than Vietnam and the Philippines. The ASEAN's ICT industry of Singapore that has been exported to countries in the group, only 20% of the market is Indonesia and Malaysia. In Malaysia will be subject to the industry's Software & Services Outsourcing (SSO) with employment figures up to 38,032 people and has a number of companies under the MSC about 1,500 (for 2009). In Vietnam shows the number of software and digital content at up to 105,000 people in 2009. In Philippines IT & BPO staff numbers more than 1.5 million people. In Myanmar has recently held earlier this year (Thanachart Numnonda 2012).

### **Conclusions**

This article aims to provide a better understand the fundamentals of ICT outsourcing and capabilities of ASIAN countries to preparing for the AEC (ASEAN Economic Community). Although, the liberalization of the ASEAN will be benefit to the population in these region. However, the different capacities of human or different cultures or even a political basis etc. will inevitably affect the course of each country for joint investment. In the competition of the service ICT, The impact on many aspects of ICT, especially the staff of the Initiative's fifth, will affect the movement of labor skills and ICT. It also shows the ranking of ICT as a major source. Development of IT in each country in Southeast Asia is relatively new to the management of IT outsourcing relationships. However, the level of experience depends on the government's visions and policies of each country.

## References

- Ang, S., and Straub, D. (1998). "Production and Transaction Economies and IS Outsourcing: A Study of the U.S. Banking Industry," *MIS Quarterly* (22:4), December, pp 535-552.
- Attewell P and Rule J B, (1991). "Survey and Other Methodologies Applied to IT Impact Research: Experiences From a Comparative Study of Business Computing". In *The information Systems Research Challenge: Survey Research Methods - Volume 3*, (Kraemer K L, Ed.), pp.299-315, Harvard Business School Press, Boston, MA.
- Aubert, B.A., Rivard, S., and Patry, M. (2004). "A transaction cost model of IT outsourcing," *Information and Management* (41), pp. 921-932.
- Beasley M, Bradford M and Pagach D. (2004). "Outsourcing? At your own risk". *Strategic Finance* ; 86(1):22-9.
- Carmel, E., (2003a). "Taxonomy of new software exporting nations," *Electronic Journal of Information Systems in Developing Countries* (13: 2) , pp. 1-6.
- Carr, N. (2004) "Does IT Matter?", Harvard Business School Press, Harvard, MA.
- Craswell, A, Francis, J.R. and Taylor, S.L. (1995). "Auditor Brand Name Reputation and Industry Specializations", *Journal of Accounting and Economics*, 20, 297-322.
- Drazin, R. Van De Ven, A.H. (1985), "Alternative Forms of Fit in Contingency Theory." *Administrative Science Quarterly* 30: 514-539.
- Glewwe, P., M. Gagnolati, and H. Zaman. (2000). "Who Gained from Vietnam's Boom in the 1990s? Washington, DC: The World Bank.
- Hafeez-Baig, A., De George-Walker, L., Gururajan, R. and Danaher, P.A. (2011). "Challenges and Opportunities for Academics Adopting an Online Peer Review Innovation," *Studies in Learning, Evaluation, Innovation and Development* (8:1), pp 26-37.
- Heeks, R. and Nicholson, B. (2002). *Software Export Success Factors and Strategies in Developing and Transitional Economies*. Development Informatics Working Paper Series Working Paper No. 12.
- Hu H, Penn SG, Lebrilla CB, and Brown PH (1997) . "Isolation and characterisation of soluble B-complexes in higher plants". The mechanism of phloem mobility of boron. *Plant Physiol.* 113, 649-655.

Jurison, J. (1995), "The Role of Risk and Return in Information Technology Outsourcing Decisions", *Journal of Information Technology*, No 10, pp. 239-247.

Koh, C., Ang, S., and Straub, D.W. (2004). "IT outsourcing success: A psychological contract perspective". *Information System Research*, 15(4), 356–373.

Lacity, M. C. and Willcocks, L. (1998). "An Empirical Investigation of Information Technology Sourcing Practices: Lessons from Experience", *MIS Quarterly*, Sept., 363-408.

Lacity, M. and Willcocks, L. (2006), "Global Sourcing of Business & IT Services". Palgrave MacMillan, New York, NY.

Levina, N. and Ross, J.W. (2003). "From the Vendor's Perspective: Exploring the Value Proposition in Information Technology Outsourcing", *MIS Quarterly* 27(3): 331-364.

Quinn, J.B. and Hilmer, F.G. (1994). "Strategic outsourcing", *Sloan Management Review*, Vol. 35, No. 4, pp. 43-56.

Rouse, A.C, Corbitt, B.J., and Aubert, B.A. (2001). "Perspectives on IT Outsourcing Success": Covariance Structure Modelling of a Survey of Outsourcing in Australia. The 9th European Conference on Information Systems, Bled, Slovenia.

Spathis, C. and Constantinides, S. (2004), "Enterprise resource planning systems' impact on accounting processes", *Business Process Management Journal*, Vol. 10 No. 3, pp. 234-247.

Smith, Michael Alan, Sabyasachi Mitra and Sridhar Narasimhan. (1998), "Information Systems Outsourcing: A Study of Pre-Event Firm Characteristics", *Journal of Management Information Systems*, Vol. 15, No. 2, pp.61-93.

Sparrow, P.R. (2003). "Knowledge management, organizational learning and cognitive psychology" : unravelling important individual and organizational competencies. *Revista de Psicologia del Trabajo y de Las Organizaciones*, 18 (2), 131-156.

Sobol, M. G and U. M. Apte. (1995). "Domestic and global outsourcing practices of America's most effective IS users". *J. Inform. Tech.* 10(4) 269–280.

Saunders, M. W., B. M. Leaman, and G. A. McFarlane. (1997). "Influence of ontogeny and fishing mortality on the interpretation of sablefish, *Anoplopoma fimbria*, life history". In *Proceedings of the international symposium on the biology and management of sablefish.*, p. 81–92. NOAA Tech. Rep. NMFS 130.

Teng, J. T. C. , Cheon, M. J. , and Grover, V. (1995). "Decision to Outsource Information Systems Functions": Testing a Strategy-Theoretic Discrepancy Model. *Decision Sciences*, 26(1), 75-103.

Weill, P. and M.R. Vitale (2001). "Place to Space. Migrating to e-business Models. Boston": Harvard Business School Press.

Thanachart Numnonda, (2012). "AEC (2015) : Impact on IT", Presentation by Software Park Director for Thai Airway's IT Department on 11 July 2010.

*<http://www.sourcingle.com>*

# Effects of Organization Performance on Share Price: an Empirical Study of the Top Performing Manufacturing Companies Listed on Nigeria Stock Exchange

---

***Fagbemi Ayodele Omoyiola Ph. D***

*Associate Professor, National Open University, Lagos , Nigeria*

***Abata Matthew Adeolu Ph. D***

*Senior Lecturer, Department of Accounting and Finance, Lagos State Univeristy,  
Ojo, Lagos Nigeria*

## **Abstract**

This study is on the relationship between share price movement and organizational performance in the Nigerian manufacturing sector. This is necessitated by recent developments in the Nigerian capital market emanating from alleged mismanagement and manipulation of share prices on the floor of the Stock Exchange which brought out certain irregularities that were hitherto unknown. These are counterproductive to Nigerian economic growth and development. The study empirically assesses share price movement and organizational performance with a view to ascertaining the influence of firms' performance on share price changes. Data were obtained from secondary sources. The study employs econometric tool of multiple regression as the main tool of analysis. The regression results reveal positive relationship between share price movement and organizational performance, as shown by the  $R^2$  and adjusted  $R^2$  0.807 and 0.735 respectively. The findings indicate that the influence of sales volume on share price is greater than other firms operating performance in the model. In the light of this finding, it is recommended that vigorous policing and enforcement of punitive actions against insider abuse and other forms of market manipulation are required to ensure fair trading.

**Keywords:** Share price, sales volume, profit after tax, earnings per share, stock market and organisational performance

## Introduction

The price of a share quoted in the stock market has been known to be reflective of many endogenous (intrinsic) and exogenous (extrinsic) variables referred to as fundamentals. Some of these variables are sometimes measurable while others remain the product of non-quantifiable human behaviour. The objectivity is the extent that the forces of demand and supply determine the prices of shares from time to time. The demand appears to be a product of subjective reasoning especially in the Nigerian context where investors take decisions on behavioral stimulus rather than applying the fundamentals (intrinsic and extrinsic factors) of the firm. This is corroborated by Murunde (2006), who states that while some firms' fundamentals nose-dive, the share price of such firms' keep growing. On the contrary, while some firms' shareholders' wealth are growing, their share prices in the capital market keep dropping.

The price of a commodity is usually determined by the forces of demand and supply in a free economy. This is not totally true for the stock/securities market. In the securities market, whether the primary or the secondary market, the price of equity is significantly influenced by a number of factors which include book value of the firm, dividend per share, earnings per share, price earning ratio and dividend cover (Gompers, Ishii & Metrick, 2003).

The factors affecting the price of an equity share can be viewed from the macro and micro economic perspectives. Macro economic factors include politics, general economic conditions which reflect how the economy is performing. There are also other factors like demand and supply conditions which can be influenced by the performance of the company; the performance of the company vis-a-vis the industry and the other players in the industry.

There have not been conclusive evidence in literature on the nature of relationship between share price movement and organizational performance especially in Nigeria (Kehinde, 2012; Persson, 2008; Lamont, 1998; Lev, 1989, Shiller, 1984; Fama and French, 1988; Sivakumar and Waymire, 1993). For instance, Persson (2008), finds that the firm's operating performance can explain a significant portion of the stock price movements but Lev (1989) conducts a review of several studies on the information content of earnings and reports that changes in earnings are only weakly related to contemporaneous stock returns. He also found that the operating performance is not significantly related to contemporaneous stock return. Kehinde (2012), reports that change in the price of share of quoted firms can be attributed to change in certain fundamental factors such as financial performance (measured by dividend paid by the firm, the earning made by the firm etc ), the macroeconomic variables (such as interest rate ruling , inflation rate etc) and market noise (i.e. popular opinion of financial analyst of repute; insider information). The study identified white noise as an important factor in share price movement and prediction.

To effectively correlate the value of a firm's share price with an organization's performance, one must estimate various performance variables that possess the ability to influence the stock market value of such a firm. There are various performance variables in the literature. Littner *et al* (1997) differentiate between financial and non-financial performance variables. March and Sulton (1997) identified organization turnover (sale), profit after tax, market share, equity/debt ratios and dividend paid as financial measures of organizational performance. Non-financial performance measures include goodwill of



the firm, productivity, and managerial capacity of the firm (March and Sulton, 1997). Against this background, it is necessary to find out the extent to which organizational performance influences share prices.

The objective of this paper is to determine to what extent stock prices listed companies in the Nigeria stock market are driven by organizational performance. This is of particular interest because the Nigerian stock market is widely viewed as a very speculative, policy driven market.

### **Conceptual Clarification**

Several extant of studies have been conducted on the relationship between firms' operating performance and the stock returns but the results have not been conclusive. Gidófalvi (2001) cited in Kehinde (2012) examine the relationship between financial information availability and the share price movement and find in a careful experiment a definite predictive power for the stock price movement in the interval starting 20 minutes before and ending 20 minutes after financial news become publicly available. Lamont (1998), studies the relationship between earnings and expected returns. He reports that both dividends and earnings have the ability to forecast returns and that earnings contain information because they are correlated with business conditions. He also finds that higher volatility of earnings is not noise but related to expected returns. Shiller (1984), and Fama and French (1988), use regressions of returns on the lagged dividends and earnings yield and find that they have explanatory power. Sivakumar and Waymire (1993), study stock price behavior in relations to earning reports by 51 NYSE firms. They find that the announced earnings are positively related to stock returns.

Roll (1988), regresses individual stock price changes on contemporaneous news events and finds that less than 40% of the variance of price changes can be explained by the regressions. Fama (1990), finds that two-thirds of the variance of aggregate stock price changes can be explained by the variables proxying for corporate cash flows and investors' discount rates. Campbell and Ammer (1993), contend that the use of contemporaneous regressions to explain asset price variability is appealing though this approach does not provide much information on the channels through which macroeconomic variables affect asset prices. Adjasi and Biekpe (2005), investigated the relationship between stock market returns and exchange rate movements in seven African countries. The Co-integration tests showed that in the long-run exchange rate depreciation leads to increases in stock market prices in some of the countries, and in the short-run, exchange rate depreciations reduce stock market returns. Lev (1989), conducts a review of several studies on the information content of earnings and reports that earnings changes are only weakly related to contemporaneous stock returns. Su (2003), analyzes the dynamic behavior of risks and returns in the Chinese stock market and finds that the volatility of stock returns to be high in China relative to developed markets and that returns are positively auto-correlated to greater extent in Chinese stock markets than in developed markets. He also finds that some of the government policies in regards to the stock market contribute to the market volatilities. Jin and Li (2003), also study the causes of high volatility and irrational price movements in the Chinese stock market and identify poor disclosure and inaccurate financial reports by the listed firms as some of the causes for high volatility.

### Conceptual Framework

To achieve the objective of this study, a model of share price as a function of organizational performance was developed. A diagrammatic representation of the relationship between organizational performance and share prices is presented in Figure 1.

There are many organizational performance measurement variables in the literature. The model of this study has two major measures, which are financial performance and non-financial performance measures. The combined effects of financial performance and non-financial performance constitute the organizational performance which influence share price. The main financial performance variables employed in this study are sales or turnover, profit after tax and earnings per share (EPS).

### A Model of Share Price As A Function of Organizational Performance

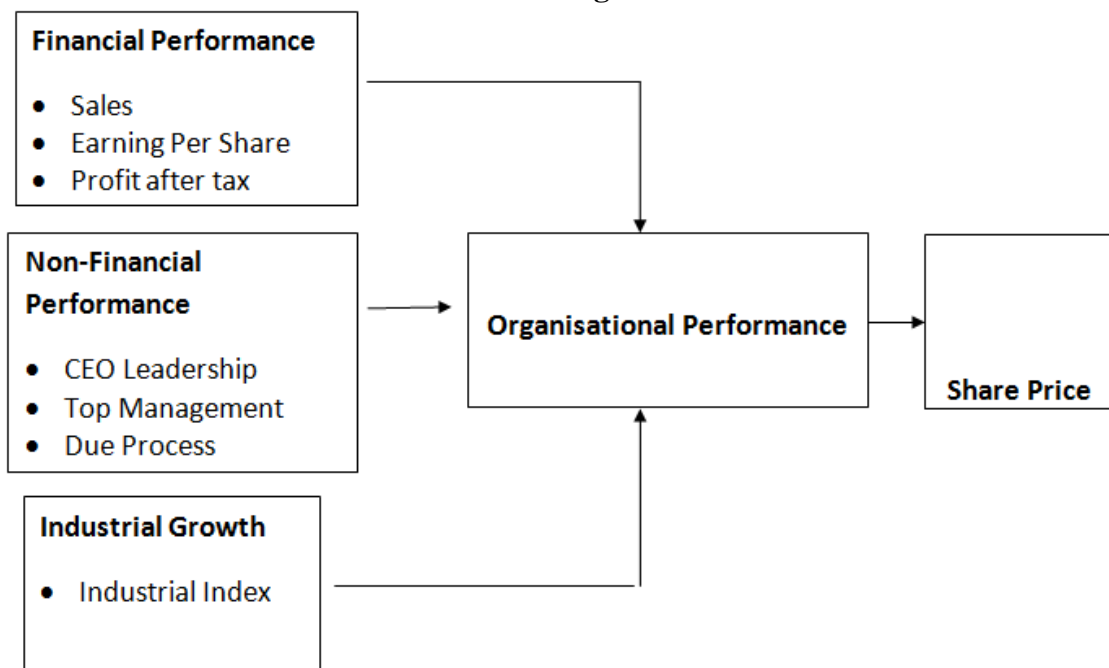


Fig 2.5: A model of share price as a function of organizational performance.

**Source: Abata( 2011).**

Firms choose a share price level both when they split their seasoned shares and when they go public (Falkenstein, 1999). Dhar, Goetzmann and Zhu (2003) provide empirical support for the notion that lower share prices make stocks more attractive to individual investors. Baker and Gallagher (1980) and Baker and Powell (1993) have argued that maintaining a preferred price level is the primary motivation for managers to undertake stock splits.

Earnings per share is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio. The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability.

In a study of quality of earnings and its relationship with various aspects of corporate governance, Al-Sharif (2008), used a model to analyse a sample of 315 firms-year observations for 45 Jordanian Industrial Public Shareholding companies listed at Amman Stock Exchange. The Non-financial performances used in the model are Chief Executive Officer's Leadership Style (CEO), Senior Management and Corporate Governance. A study of the impact of CEO leadership style on the financial performance of an organization assumed that the CEO has influence over the company's decisions. Finkelstein and Boyd (1998) find that high levels of discretion given to CEO's by the boards of Directors increases their ability to directly influence firm performance. Central to Finkelstein and Boyd's managerial discretion concept is the idea that strategic leadership, especially as embodied in the role of the CEO is pivotal to the success of the firm.

Patel and Wolfson (1984) showed that top management changes announcements 'interrupt' the usual pattern of return serial dependence for at least fifteen minutes and that share prices do not revert completely to their normal pattern for up to ninety minutes. Although they make no explicit statement about how this happened, they clearly have in mind the activities of arbitrageurs who offset the impulsive reactions to company announcements of naïve investors.

Therefore a good, sound and healthy corporate governance policy is a very important criterion while investing in a company (Shen, Shu, and Chen, 2006). This area has been an interested area of analysis for many researchers. There have been some of the relevant researches done which are worthwhile mentioning. Black and Khanna, (2007), in their path breaking work, did an event study on change in share price of the companies with respect to regulations passed by the regulatory bodies in India.

### **Data and Methodology**

Historical research methodology was used in this study using publicly available archival data. Basically the regression model was applied on Nigerian Stock Exchange on the data of companies. The population size is 78 quoted manufacturing companies in Nigeria Stock Exchange (NSE). The sample consists of 25 firms that were listed in the Nigeria Stock Market. Twenty of these selected firms have been trading before 1997, were the most traded on the floor of the stock exchange during the period under consideration, and constituted 70% of the total market capitalization of the total quoted manufacturing companies. In addition to the twenty, for fair representation, five quoted manufacturing companies were equally chosen to represent the weakly traded manufacturing companies in the stock exchange market. The list of the companies are provided in Table 4. The data have been collected from Nigeria Stock Exchange and Annual Reports and Accounts of the sampled companies for the time period of 1997 to 2008. In this study the dependent variable is, Market Price of Shares (MPS) in Nigerian Stock Exchange. The average market value of shares of 25 manufacturing companies for the time period of 1997 to 2008 were collected. Three (3) independent variables were chosen in order to identify how they affect the determination of the market value of share. The variables are:

- (1) Profit after tax (PAT) of selected companies;
- (2) Sales in of selected companies;
- (3) Earnings per share (EPS) of selected companies.

This study tested the hypothesis that share prices do not reflect the financial performance of a quoted firm in Nigeria. The following regression model was used for data analysis:

$$MPSt = \beta_0 + \beta_1PAT + \beta_2SALES + \beta_3EPS + et$$

Where,

$\beta_0$  = constant

$\beta_1, 2...3$  = coefficients of predictors

PAT: Profit after tax

SALES : Sales

EPS: Earnings per Share

### Analysis of Data and Findings

Table 1 presents the means, standard deviation, minimum and maximum value of the variables. In descriptive statistics it was found the mean value of EPS, PAT, SHP, and SALES are 85.26500, 1177595, 6.686667 and 13331716 respectively. The standard deviation of EPS, PAT, SHP, and SALES are 52.25392, 722821.2, 1.127849, and 7476103 respectively. The comparison of the performance indicators show that the mean value of sales is the highest, indicating that this variable greatly influences share price. Also the minimum maximum and range value are shown in Table 1.

**Table 1: Summary statistics of average EPS, PAT, SHP and sales of selected manufacturing companies in nigeria from 1997-2008**

	EPS	PAT	SHP	SALES
Mean	85.26500	1177595.	6.686667	13331716
Median	69.09000	1261009.	6.705000	12196458
Maximum	173.0000	2373072.	8.500000	24777067
Minimum	26.00000	313949.0	4.900000	4789890.
Std. Dev.	52.25392	722821.2	1.127849	7476103.
Skewness	0.355465	0.257186	0.098185	0.292400
Kurtosis	1.638843	1.923800	2.044151	1.586714
Jarque-Bera	1.179085	0.711393	0.476105	1.169683
Probability	0.554581	0.700685	0.788161	0.557194
Sum	1023.180	14131140	80.24000	1.60E+08
Sum Sq. Dev.	30035.19	5.75E+12	13.99247	6.15E+14
Observations	12	12	12	12

**Sources:** Nigeria Stock Exchange Daily Official List, 2010; Annual Reports and Accounts of the sampled companies

Table 2 shows the yearly average (1997 to 2008) performance of selected manufacturing companies listed on the Nigeria Stock Exchange. As observed from the table, there is phenomena growth in the performance indicators for each of the years.

**Table 2: Average PAT, SHP, SALE, EPS of selected manufacturing companies in nigeria from 1997-2008**

YEAR	PAT	SHP	SALE	EPS
1997	326595	6.04	4789890	29
1998	313949	4.9	5570818	31
1999	359513	5.3	5495364	26
2000	493653	6.13	6426331	52
2001	893240	5.74	8365321	60.18
2002	1114962	6.51	10685229	125
2003	1448362	7.2	13707687	173
2004	1407056	6.9	16664804	149
2005	1569884	8.3	18735939	112
2006	1556638	7.12	20704303	78
2007	2274216	7.6	24777067	141
2008	2373072	8.5	24057833	47

**Sources:** Nigeria Stock Exchange Daily Official List, 2010; Annual Reports and Accounts of the sampled companies

**Table 3: Regression results (dependent variable: SHP)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.966474	0.407387	12.19105	0.0000
PAT	1.03E-06	1.11E-06	0.926235	0.3814
SALES	3.46E-08	1.03E-07	0.334521	0.7466
EPS	0.000555	0.004115	0.134986	0.8960
R-squared	0.807295	Mean dependent var		6.686667
Adjusted R-squared	0.735030	S.D. dependent var		1.127849
S.E. of regression	0.580563	Akaike info criterion		2.011564
Sum squared resid	2.696425	Schwarz criterion		2.173199
Log likelihood	-8.069383	Hannan-Quinn criter.		1.951721

F-statistic	11.17138	Durbin-Watson stat	2.528053
Prob(F-statistic)	0.003121		

**Table 4: Companies Included in the Study**

S/N	COMPANIES	CLASSIFICATION
1.	Berger Paints Plc	Chemical & Paints
2.	Guinness Nigeria Plc	Breweries
3.	Ashaka Cement Plc	Building materials
4.	PZ Cussons Nigeria Plc	Conglomerates
5.	UAC Nigeria Plc	Conglomerates
6.	7-up Bottling Company Plc	Food/Beverages & Tobacco
7.	Nestle Nigeria Plc	Food/Beverages & Tobacco
8.	Nigeria Bottling Company Plc	Food/Beverages & Tobacco
9.	Evans Medical Plc	Healthcare
10.	Glaxo Smitline Consumer Plc	Healthcare
11.	May & Baker Nigeria Plc	Healthcare
12.	Nemeth International Pharmacy Plc	Healthcare
13.	Vita foam Nigeria Plc	Industrial/Domestic Products
14.	CAPL Plc	Chemical & Paints
15.	Cadbury Nigeria Plc	Food/Beverages & Tobacco
16.	Nigerian Breweries Plc	Breweries
17.	Benue Cements Company Plc	Building Materials
18.	Nigerian Floor Mills Plc	Food/Beverages & Tobacco
19.	Lafarge WAPCO Plc	Building Materials
20.	Unilever Nigeria Plc	Conglomerate
21.	Vono Products Plc	Industrial/Domestic products
22.	Pharma-Deko Plc	Healthcare
23.	DN Meyer Plc	Chemical & Paints
24.	Nigeria-German Chemical Plc	Chemical & Paints
25.	Northern Nigeria Flour Mill Plc	Food/Beverages & Tobacco

**Source:** Nigeria Stock Exchange Daily Official List, 2010.

The model was tested by ordinary least-squares (OLS) estimators. Using multiple regression analysis of all period of the study, the result in Table 3 indicates that the linear function model accept the hypothesis. The results reveals positive relationship between share price movement and financial performance variables between 1997 and 2008. The adjusted R squared value is very high (0.735) indicates that the model explains 80.72 per cent of the variation in market value of share. F- ratio is found significance at F- value = 11.171  $\alpha = (0.05)$ , this that means the regression model is highly significant at 95 percent level of significance. Also the independent variables namely PAT, SALES and EPS is positive and significant at t- test  $\alpha = 0.01$ , ( $p < 0.01$ ). Analysis of individual correlation coefficient reveals that correlation between share price and sales is the highest, signify that sales greatly influence share price than EPS and PAT. Therefor, sales performance exacted greater influence share price of the organization. The hypothesis that the Share prices do reflect the financial performance of a firm in Nigeria is accepted. The positive PAT, SALES and EPS coefficients in relation to the stock price is in agreement with some other studies (Udegbunam and Eriki, 2001; Ibrahim 2003; Mukherjee and Naka 1995; Chaudhuri and Smiles, 2004).

### **Conclusion**

Using a sample that consists of the 25 performing firms that were listed in the Nigeria stock market from 1997 to 2008, we study the relationship between organization performance and share price movement. This study was necessitated by need to see how firm's performance affects share price and to identify which performance indicator prominently influenced share prices in these companies. The regression result showed that share price movement in stock market is significantly determined by financial performance measures, which is consistent with prior studies (Gompers and Metrick, 2000). Also, our results indicate that among the organization performance indicators, sales influenced share price movement greater than the other operating performance because sales volume is expected to directly impact on the profit after tax of a corporate establishment if cost is effectively controlled and other things remain equal. The study therefore, concludes that, the model developed provide a good understanding of share price movement in stock market in Nigeria.

### **Recommendations**

The study recommends that quoted firms should comply with financial regulations and disclosure requirements (Statement of Accounting Standards, Company and Allied Matters Act as amended, International Financial Reporting Standards) in the preparation of their annual financial statements. This will enhance objectivity and fairness in the reported contents.

Listed companies should adopt updated Auditing guidelines and Audit practices to enhance the quality of financial reporting. Equally, companies in the same industry should adopt common reporting format so as to provide a good basis for comparison and improve disclosure . This is in consonance with the Central Bank of Nigeria prudential guideline to all licensed banks. Replication of such rule in companies will improve corporate performance.

Financial regulators like Chartered Institute of Bankers of Nigeria (CIBN), Institute of Chartered Accountants of Nigeria (ICAN), Central Bank of Nigeria (CBN), Nigeria Stock Exchange (NSE), Security and Exchange Commission (SEC), Chartered

Institute of Stockbrokers (CIS) should form a joint committee to discuss regularly the sources of distortion in share price movement and evolve modality to effect corrections where necessary.

## References

Cambell, J.Y and Ammer, J. (1993). "What Moves the Stock and Bond Markets? A variance Decomposition for Long-Term Asset Returns". *The Journal of Finance*, 48 (1): 3 -37

Campbell, J. and John, A. (1993). "What moves the stock and bond markets? A variance decomposition for long-term asset returns". *Journal of Finance*, 1, 3-37.

Chadhri, C. and Smile, K. (1991). Information Migrates in Experiemental Asset Market. *Journal of Business* 64(4): 463-493

Fama, Eugene (1990). "Stock returns, expected returns, and real activity". *Journal of Finance*. 45, 1089-1108.

Fama, E. and Kenneth, F. (1988). "Dividend yields and expected stock returns". *Journal of Financial Economics*, 109, 241-266.

Gidofalvi, G. 2001. Using News Articles to Predict Stock Price Movements. Department of Computer Science and Engineering. University of California, San Diego.

Gompers, P., Ishii, J. and Metrick, A. (2003), "Corporate Governance and equity price", *The Quarterly Journal of Economics*, Feb.2003,: 107-155.

Ibrahim, Mansor H. (2003), "Macroeconomic Forces and Capital Market Integration: A VAR Analysis for Malaysia," *Journal of the Asia Pacific Economy*, 8 (1)

Kehinde, S.J. (2012). "Share Price Movement and White-noise Hypothesis: the Algebraic Approach". *International Journal of Information Business and Information Technology*, 2, 1, 10-15.

Lamont, O. & Owen, R. (1992). "Earnings and expected returns". *Journal of Finance*, 5, 1563-1587.

Lev, B. (1989). "On the usefulness of earnings and earnings research: lessons and directions from two decades of empirical research." *Journal of Accounting Research*, 153-192.

Lynch, R. L. and Cross, K. F. (1995) Measure Up! – Yardsticks for Continuous Improvement, Oxford, Blackwell.



Lynge, M. (1981) Money Supply Announcements and Stock Prices, *Journal of Portfolio Management*.

Mukherjee, T and A. Naka, 1995, Dynamic Linkage Between Macroeconomic Variables and the Japanese Stock Market: An Application of a Vector Error Correction Model, *Journal of Financial Research* 18, 223-37.

Murunde, V. (2006). *Capital Market: Roles and Challenges*, London: University of Birmingham Publication.

Shiller, S. & Robert, O. (1984). "Stock prices and social dynamics". *Brookings Papers on Economics Activity*, 457-498.

Sivakumar, K. and Gregory, W. (1993). "The information content of earnings in a discretionary reporting environment: evidence from NYSE industrials, 1905-10". *Journal of Accounting Research*, 31(1): 62-91.

Udegbonam, R.I and P.O. Eriki (2001). "Inflation and Stock Price Behaviour: Evidence From Nigerian Stock Market". *Journal of Financial Management and Analysis*, XXX(14)

# An Appraisal of Absolutism, Relativism and Tolerance

---

***J. O. Fasoro, Ph.D***

*Ekiti State University, Ado-Ekiti, Ekiti State*

*Department of Philosophy*

*rotimifasoro@gmail.com*

## **Abstract**

The paper takes issue with the construal of the objectivity of morals as meaning the same as absolutism, and that the latter concept breeds intolerance. It argues that rather than promoting moral conflicts, and objectivist should be ready to shift grounds on moral disputes in the face of overriding evidence and rational persuasion. It is further argued that relativism is more prone to promoting intolerance once moral values are believed to be culture-bound and determined. It is contended that the concept 'tolerance' or 'toleration' must be carefully handled in order not to allow it to degenerate to moral indifference or insensitivity, a situation that would make moral progress and development almost impossible. It is then concluded that whenever a party to a moral dispute 'tolerate' the opposing view, it might be for the purpose of promoting communal peace rather than accepting that both conflicting views on the same issue are 'true'.

**Key words:** Absolutism, Relativism, Tolerance, Objectivity, Moral progress and development, Cross-cultural value.

## Introduction

P.H. Nowell – Smith (1954:41) had argued that:

*The objective theory, so far from minimizing the use of force to settle moral conflicts, can be, and constantly has been used to justify it. It is no accident that religious persecutions are the monopoly of objective theorists.*

In the above passage, one may infer that Norwell-Smith aimed at doing two things. First, he wanted to deny that ethical statements as well as moral judgements were objective, and that any attempt to construe them as such would inevitably lead to conflict among people of different moral persuasions. A corollary of this conviction is the belief that ethical relativism may serve as a better theory in settling moral conflict in any society. Secondly, and in accordance with the tradition of the Linguistic non-cognitivist school of thought, a school to which Norwell-Smith belongs, he did not appear to see any difference between ‘absolutism’ and ‘objectivity’. This is the more reason why he argued (1992) that the task of the moral philosopher was to mark out the mutual relationships of moral words, sentences, and arguments.

This said, it was then argued that the quest to assert the objective content of moral judgements and ethical statements in order to act on same would lead to persecution. A similar argument is usually brought against religious statements and judgements where it is argued that a claim to objectivity in religious matters inexorably leads to religious persecution both among certain sects within a particular religion, and among members of different religions.

In this paper, I do not intend to take much issue with the relativist, but to question the alleged link between relativism and tolerance. Put differently, my thesis is a rejection of the following presuppositions:

1. That relativism is an antithesis of absolutism;
2. That relativism promotes tolerance and peaceful coexistence among peoples of different cultural backgrounds.

Consequently, I will argue that rather than seeing relativism as promoting tolerance, it may indeed promote intolerance the very moment two or more cultures are brought face to face. Secondly, I intend to argue that the relativist’s own conception of tolerance may be nothing more than moral indifference. A corollary of my thesis is that the toleration of something or some act is not a proof that that thing or act is not bad or wrong, or that there are no better alternatives to the thing or act so tolerated. But before I proceed further, let me say a word or two on ‘absolutism’, ‘relativism’, and ‘tolerance’ this will, at least throw some light on how these concepts are being used in this essay.

## Absolutism

The Advanced Learners Dictionary defines the word ‘absolute’ as complete, perfect; unlimited, having complete power; real undoubted; unconditional and unqualified. Unconditional, unqualified – appear to come closest to the sense in which the word ‘absolute’ is usually used in ethics. On the other hand, the Dictionary of Philosophy (1992) defines ‘absolutism’ as, (in politics) the exercise of power unrestricted by any checks and balances; and (in philosophy) the opposite of ‘relativism’, and hence infected with all the same ambiguity and indeterminacy. However, I do not understand why absolutism should be construed as the opposite of relativism bearing in mind that there is

an element of absolutism in relativism. The sense in which this is so will be explained later. An absolutist holds that certain ideas, values, are unconditionally valid, good, in any time and in any place, eternal and immutable (Ojo: 1992).

### **Relativism**

Any ethical position which denies that there is a single moral standard which is equally applicable to all men at times may fairly be called a specie of relativism (1984). Relativists hold that “what is worthy of approval or disapproval in one society is different both in detail and on the whole from that of another” (1975). Other philosophers have argued that “...each society or community has its own norms and morality and it is entirely a matter of conforming to the standards and rules accepted in one’s own culture” (1987).

### **Tolerance**

To tolerate is defined as to allow or endure without protest. It follows then that tolerance means acceptance of what one objects to or disapproves of. It is further explained as the ability to endure, suffer or put up with a person or idea of which one does not really approve. It presupposes a power to act out of the objection – although declining to utilize it (Ojo, op. cit; 49). It should be stressed here that it will be erroneous to hold that acceptance of tolerance as a rule or principle means a rejection of relativism. For instance, A’s toleration of B’s views or system of values may be as a result of B’s perception of the better or superior nature of B’s system of values. In that wise, what actually informs that toleration may be nothing more than the fact that even though A still cherishes its cultural values, it nonetheless admires the attractions of other system of values, notwithstanding the fact that these other cultural values are opposed to those in A’s culture.

### **Conceptual Link Between Absolutism and Objectivity, and Between Relativism and Tolerance**

Contrary to the belief of certain moral philosophers, the objectivist or universalist does not support the exaltation of one’s systems of values as the absolute and best, while dismissing other systems of morality as false or inferior. Based on this erroneous belief, it is often argued that ethical relativism supports the spirit of toleration and mutual respect for the right of others to disagree with us. Objectivists do not rule out the right of any person to disagree with the rest of the community, rather, their argument is that the moral dissenter must be able to adduce convincing reasons for his action. In the end, the greater majority of the people may come to agree with the position of this single moral dissenter once it is discovered that his arguments are valid and his position is more acceptable. In that wise, we can talk of his views as the right ones while other contrary views may be regarded as wrong. But this is what we cannot say if relativism is correct. Perhaps, the only context in which we may talk of one moral point of view as being right and another wrong, is where such a judgement is restricted to a particular culture, but definitely not when what obtains in the one culture is used as a parameter for judging what obtains in another. In that wise, it means that we cannot talk of the truth or correct position of anything in dispute among different cultures and people! Supporters of relativism sometimes fail to recognize one basic problem in their theory. If someone adopts non-interference in the name of relativism and tolerance, it does not mean that such a person does not perceive the shortcomings or inadequacies in the cultural practices either of his

own people or those of other peoples. Instead of pointing out such inadequacies or shortcomings in the cultural practices of these peoples, the relativist is constrained to accommodate everything that comes from them thereby allowing no room for self-improvement. It follows, therefore, that unrestrained tolerance may be an invitation to moral bankruptcy for the simple fact that if such a person comes across a situation where morality is being thrown to the dogs he will not care a hoot. In addition, it is even wrong to assume that all arguments usually brought in support of relativism are informed by the willingness or readiness to tolerate other people's point of view. What is taken to be tolerance in some cases may be nothing more than indecision or uncertainty concerning the moral issue at stake. Someone may not be sure of one's beliefs thereby tolerating other people's point of view. This is not to say that there are no genuine cases of tolerance, but relativists of all hues appear to be silent as to how inter-communal moral conflict may be resolved. Also, relativism encourages non-objectivity. For instance, if you firmly believe that your view on certain moral issue is correct, all you will try to do is to convince the other party holding a contrary view of the correctness of your position and argue for why you believe so. However, it may so happen that the other person is adamant or incorrigible, and the desire for peaceful co-existence may compel you to tolerate his views, but it will be wrong of you to believe that both of you are right. Truth cannot be sacrificed at the altar of tolerance. Moreover, the relativist, as I can understand him, is not claiming that his denial of cross-cultural objectivity is meant to foster tolerance among diverse cultures, rather, he is saying that truth and objectivity are, and can only be, determined within particular cultures. Following from his assumption is his conviction that what is moral or good in this culture may be otherwise in that culture. If it is the desire to promote tolerance among cultures that informs the relativist's thesis, then disputes about cross-cultural objectivity evaporate. In that context, the relativist's argument may simply be stated as follows: if, when, and where two or more cultures hold conflicting views on what is either right or good, these cultures should try as much as possible to tolerate each other's views in order to promote peace and concord, even though culture A is correct in its conviction. In other words, such argument as the one above should be regarded as nothing more than an appeal and even where this appeal is heeded by both parties, it still does not mean that one of the two parties is not right in holding that belief or conviction on the moral issue, while the other party may be said to be mistaken or wrong. But in ethics, our hypothetical example may be a very dangerous position to adopt. Rather than asking culture A to compromise its position, it is culture B that should be appealed to do so as to see reason or to imbibe moral uprightness. This is because whether or not culture A compromises its belief or conviction 'in the name of peace and concord'; truth will forever remain truth.\* On the other hand, it may be morally wrong in certain contexts to be tolerant. This means that the word of tolerance or toleration is itself value laden. For instance, I am not morally bound to tolerate burglars to cart away my property. If I sincerely believe that burglary is a moral evil, then no one can convince me that it may be wrong in my culture while it may be right in other cultures, and that it is wrong of me to condemn the act.

*If one believes something is right, then one must also believe the opposite to be wrong and if you are sincere in your moral beliefs, you must necessarily wish to see that moral principle implemented in practice (Blocker and Steward: 1987).*

It is also mistaken to think that an appeal to tolerance affords the relativist the opportunity to avoid the problems (whatever they are) associated with absolutism. Objective moral judgements need not rest on absolute moral codes. The relativist appears to believe that universally binding moral law will have to be based on absolute moral principle, and I consider this to be a mistaken belief. Objective moral principle does not presuppose absolutism, as philosophers like Norwell-Smith tend to think. However, this is not to say that moral codes cannot be accorded relative stability, which the relativist's thesis may not allow. It is true that the relativist may still talk of 'objectivity' if only this concept is restricted to a particular culture. However, he does not think that cross-cultural objectivity is a possibility.

*...It is impossible to find any basis for universally binding law; but it is quite easy to discover a basis for morality, if moral codes are admitted to be variable, ephemeral, and relative to time, place and circumstances (Burr: 1984).*

If one argues that moral judgements are objective, it is not the case that he is at the same time implying that such judgements are absolute. He may mean that there are convincing non-partial, non-personal reasons, valid arguments, in support of the judgements. At the end of it all, the judgements which the moral reasoner believes to be objective may turn out to be otherwise, but this discovery too comes as a result of human reasoning. But this initial mistake does not, in itself, support relativism. No one argues that a moral judgement believed to be objective may not be mistaken, for this will then mean the objectivist is also claiming to be an infallibilist. On the other hand, the word "absolute" may mean different things to different people, among which are final, immutable, irrevocable, irreversible, unalterable, ultimate, but definitely the word 'objectivity' is not usually construed in these nuances in ethics.

It is important to be clear of what we make of ethical relativism. The descriptive variant of it is the most tractable (Frankena: 1982). The fact that certain group of people do this, or believe that, is no big problem. For example, to say that the Indians practice cremation while the Yoruba in the South-Western part of Nigeria bury their dead relatives with pomp and pageantry is an incontrovertible fact. But this fact does not in the least throw any light as to which of the cultural practices (if any) is the better method of giving last respect to our dead relatives. It follows therefore that those who argue that relativism is to be preferred have not actually told us why we ought to prefer one practice, belief, or conviction to the other if, when, and where we are faced with conflicting choices of action and where we must definitely make a choice or act one way or the other. What the relativist seems to be telling us is that we should not bother to look for objective (perhaps absolute) standards common to all places, peoples, and cultures. He has already ruled out the possibility, or even the desirability of the search for such standards. We may however argue that if efforts are made to discover some common standards of behaviour among peoples of different cultural background, we may realize, to our own astonishment, that the apparent differences may give way to startling revelations about the similarities, nay identities, in their behavioural patterns as well as their belief systems. However, in trying to harmonize the apparent differences, some sacrifices will have to be made in accommodating opposing views of beliefs. This is one area where I think the question of toleration comes into play. This will be done in the spirit of give and take. In that wise, one is not called upon to merely tolerate the views of others, they too are to tolerate our view-points. Secondly, you are not being asked to tolerate beliefs you know to be wrong

or mistaken, rather, you are asked to accept the 'right' views, or 'good' acts of other people outside your particular culture. This said, it is still not clear to me why relativists are so much attracted by the 'differences' in cultures and cultural beliefs of peoples rather than their areas of convergence. They (relativists) need to take more pains to find out why people of different cultural backgrounds share similar, almost identical, cultural beliefs.

Contrary to the relativist's belief, relativism is not an easy road to peaceful coexistence among various cultures. In point of fact, once we believe that no 'external' imposition of cultural values should be allowed in the assessment of the moral values of particular cultures, we are indirectly saying that each culture is sovereign or self-sufficient, a conclusion which the relativist must logically avoid. We are then led to agree with Carl Wellman that ethical judgements have objective validity because it is possible to justify them rationally. This type of rationality cannot be said to be culture-bound or culture-determined. If ethical relativism is true, then, international relations will surely be in jeopardy. Whatever happens within particular culture – be it infanticide, genocide, cannibalism, human sacrifice, etc. – is the business of the culture! The question of whether the beliefs of that culture are mistaken does not arise. One then wonders why it is often argued that objectivity, rather than relativism, breeds intolerance. If the relativist sincerely believes that there is no objective way of evaluating cross-cultural values, and consequently the standards of each culture must be regarded as ethically ultimate (Vide: Reader: 1964), I am yet to be convinced that this is not an invitation to cultural absolutism as well as intolerance. If the people of a particular culture can sensibly talk of truth or falsity, right or wrong, then the relativist must explain the basis on which these people make such judgements and why it is thought that similar judgements cannot be made across cultures. If he thinks this to be possible, then he must equally argue that such judgements should be restricted to individuals rather than cultures, and if the plausibility of relativism is hinged largely on its opposition to an unrealistic absolutism, then the sense in which the concept – absolutism – is being used must be made clearer. If the value (moral, religious, political, social, etc.) of a culture are ultimate and it is argued that no 'external' considerations should be 'imported' in assessing or evaluating such values, then, one is at a loss in understanding what it means to say that relativism is an antithesis of absolutism. There is no doubt that consistent relativists would 'tolerate' or condone the most 'intolerant' societies since such societies are 'right' in what they do within 'their' own cultures. As one philosopher once put, in this context, we are being asked to be tolerant of intolerance! It will be wrong to assume that all the people in a particular cultural setting share identical value, an assumption that informs the relativist in his attempt to restrict the validity of values to particular cultures. And since he still believes that we can talk of a culture's values, though there are some people within that same culture who do not agree with the vast majority, the same argument should be extended to cross-cultural values though it is not here argued that all cultures share identical cultural values.

If tolerance is not reasonably handled, it may become a moral evil. For instance, if we do not approve of murder in our own culture, why then do we say that murder may be right in the next culture. There must be reasons for rejecting the act of murder in our culture, and if these reasons are clearly thought out, we must agree that anyone who engages in similar act anywhere must be regarded as acting wrongly. Moral reasons are not reasons for me alone, but they are reasons for all rational moral agents. We say murder is morally wrong because we believe that it is not an ethically neutral act. If this

act is wrong in my culture, moral consistency demands that I disapprove of similar act elsewhere. It follows logically that to reject or disapprove of murder in my culture and at the same time tolerate this same act in other cultures is an act of inconsistency.

This is why we agree with Preston King (1976:29) that:

*What we call 'tolerance' in most cases is often no more than delicate fabric which merely veils the ugly face of indifference or worse such that 'tolerance', so conceived, is reduced to a grand title.*

The relativist may aim at promoting tolerance of other people's point of view, but this does not involve total acceptance of what these other people do. To be tolerant is not the same as being morally insensitive. Again, to be consistent, the relativist must equally be tolerant of people in his culture who hold conflicting values, belief, etc. for nothing can be said to be wrong or morally bad about these other people's value systems. The fact that the people are not opposed to what certain other people do, or what they agree with them that, say cannibalism, is a morally neutral act, does not prove that their agreement is correct, or that their agreement itself is moral.

*The issue of value agreement or disagreement is largely irrelevant to the question of whatever values are absolute or relative, or standards are universally applicable or not (Paul Taylor: 1975:34).*

## Conclusion

It should be re-emphasized that this paper does not attack relativism from all possible fronts. Rather, it tries to show that the link between relativism and tolerance is spurious. It is also argued that relativism contains elements of absolutism once it is argued that each culture's values are ultimate or sacrosanct. We need to add here that if relativism is true, then we must stop talking about moral progress in our societies. This is so because where there is no such a thing as 'a better system of morals' or 'better or correct or superior values', then, there appears to be no room for improvement since there are no higher-order values to aspire toward. Moral values become things like barber's chair which though moves but nonetheless makes no progress. There may be some changes but definitely not 'for better' because one system of value is as the other. To say that we make progress implies:

*a judgement that present-day society is better and that is just the sort of judgement, that is, transcultural judgement, that according to impermissible (Bowie, 1985:53).*

Proponents of relativism may still argue for one ethical theory without necessarily laying claim to tolerance. One does not need to be a relativist in order to be tolerant. Many defenders of relativism who believe that it promotes tolerance are more or less agreeing with Norwell-Smith who argued that the claim to objectivity in ethics breeds intolerance of dissenting views. He was of the view that we do not think it necessary to resort force where logical, mathematical, or empirical truths were concerned. And he thought if moral truths can be apprehended in the same sort of way, that is to say, if there were criteria that could be appealed to in order to discover moral truths, it ought to be possible to settle moral disputes without recourse to force. However, it should have occurred to Norwell-Smith that relativism does not fare better. What, for instance, are the criteria used by the relativist in claiming that moral values are objective only when



restricted to a particular culture? Secondly, Norwell-Smith failed to tell us how many wars had been, or are being fought on moral disagreements or disputes, and the proportion of such wars to other types or kinds of war all over the world. In addition, the relativist's view on moral conflicts and its insolubility represent those of someone who construes 'objectivity' of morals to mean the same thing as absolutism. Moral conflicts or disputes are things that can be resolved rationally. Those apparent conflicts usually believed to be endemic to moral issues are not resolved or are seen as irresolvable to those who, at the outset, believe that 'they cannot be resolved' because there are no 'objective criteria' for resolving them. For what could it mean to say that "wars are fought over logical on empirical issues, just because men do in the end agree about what they see to be the case or 'see' to be locally valid. But wars are fought over moral issues, and the only difference between the subjectivist and the objectivist is that to the former this fact is not Surprising"? (Nowell-Smith, op. cit, 40). Rather than seeing the objectivist as adamant and incorrigible person, I believe that he is a humble person who is ready to shift grounds in the face of more convincing reasons, reasons that are superior to and more compelling than those that previously informed his conviction. As a matter of fact, it is the objectivist (as he is conceived in this paper) rather than the relativist that should be seen as more accommodating of dissenting views, hence someone who is indeed tolerant. If my view is correct, it is difficult to understand why it is the objectivist that is often accused of being a war monger. The relativist is more prone to fighting this type of war once he perceives that 'foreign' values are being introduced to 'undermine' his cultural values.

## Note

1. Patrick H. Norwell-Smith; Ethics; (Basil Blackwell, Oxford 1954); 41.
2. Patrick H. Norwell-Smith; “Contextual Implication and Ethical Theory” Proceedings of the Aristotelian Society (1992), 4.
3. Edited by Jennifer Speake; (Pan Books, London. 1992), 2.
4. Vide: “Relativism and Tolerance: A Critical Appraisal”; an unpublished long essay submitted to the Department of Philosophy, Ondo State University, by Ojo M. Tunji; 1992, 41.
5. Vide: R.B. John and Milton Goldgar; Philosophy and Contemporary Issues, (New York, Macmillan Publishing Company, 1984), 175.
6. Otto Bird; Cultures in Conflict, (University of Notre Dame Press, London, 1976), 14.
7. George Sheer, *et al* (eds.), Moral Philosophy: Selected Readings, (Harcourt Publishing Company, New York, 1987), 146.
8. Ojo M. Tunji, *op. cit.* 49.
9. Gene Blocker and Steward; Fundamentals of Philosophy, (Macmillan Publishing Company, New York, 1987), 275.
10. John Burr; Philosophy and Contemporary Issues, (Macmillan Publishing Company, 1984), 179.
11. Other variants of relativism are meta-ethical and normative. Descriptive relativism says that the basic ethical beliefs of different and even conflicting. Meta-ethical relativism is the theory that in case of basic ethical judgements, there is no objectively valid, rational way of justifying one against the other. Paradoxically, it then means that two conflicting basic judgements may be equally valid. And finally, normative relativism says that what is really right or good in one culture is not so in another. See, for instance, W.K. Frankena; Ethics; Second edition; Eastern Economy Edition, Prentice-Hall of India, New Delhi, 1982, 109ff.
12. Vide: Melvin Rader; Ethics and Human Community; (Rinehart and Winston Inc; 1964), 236.
13. Preston King; Tolerance, (Ruskin House, 1976), 29.
14. Paul Taylor; Principles of Ethics: An Introduction; (Dickenson Publishing Company, California. 1975), 34. Taylor rightly adds that differences in moral behaviour do not necessarily indicate differences in moral standard.
15. Norman Bowie; Making Moral Decision (McGraw Hill Company, New York, 1985), 53.
16. P.H. Norwell-Smith; *op. cit.* 40.

## Bibliography

Bird, Otto (1976) Cultures in conflict, London, University of Notre Dame Press.

Blocker, Gene and Steward (1987) Fundamentals of Philosophy, New York: Macmillan Publishing Company.

Bowie, Norman (1985) Making Moral Decision, New York: McGraw Hill Company.

Burr, John (1984) Philosophy and Contemporary Issues, New York: Macmillan Publishing Company.

Frankena, W.K. (1982) Ethics, Second edition: Eastern Economy edition, Prentice-Hall of India.

John, R.B. and Milton Goldigar (1984) Philosophy and Contemporary Issues, New York: Macmillan Publishing Company.

King, Preston (1976) Tolerance, Ruskin House.

Nowell-Smith Patrick H (1954) Ethics, Oxford: Basil Blackwell.

\_\_\_\_\_ (1992) "Conceptual Implication and Ethical Theory", Proceedings of the Aristotelian Society.

Ojo, Tunji M. (1992) "Relativism and Tolerance", an unpublished essay, Department of Philosophy, Ondo State University, Ado-Ekiti.

Rader, Melvin (1964) Ethics and Human Community, Rineheart and Wilson Inc.

Sheer, George, et al (ed.) (1987) Moral Philosophy: Selected Readings, New York: Harcourt Publishing Company.

Speake, Jennifer (1992) The Dictionary of Philosophy, London, Pan Books.

Taylor, Paul (1975) Principles of Ethics: An Introduction, California Dickenson Publishing Company.

\*This point reminds us of the then political deadlock in Nigeria. The traditional rulers as well as interest groups that were appealing to Late Chief M.K.O. Abiola to agree to, and later to accept, the annulment of the results of the June 12, 1993 presidential elections should have made such as appeal to the then military junta to accept the views and wishes of the people by upholding the results of the election. Those who trample on truth are the real enemies of peace, concord and progress rather than lovers of truth and honesty. It was General Babangida who raised the dust and thereafter complained of poor visibility.

# The Effects of Various Teaching Methods on Learning New L2 Vocabulary

---

*Gülay Bedir*

*Sevgi Bektaş Bedir*

*Gaziosmanpaşa University Faculty of Education*

*Turkey [gulaybedir@hotmail.com](mailto:gulaybedir@hotmail.com)*

## **Abstract**

The aim of this research is to define the effects of various teaching methods (classic teaching, using realia, picture-drawing) on learning, short and long-term recall of new L2 vocabulary. The experimental model research is used in this study. Participants of this study are 24 students from 10th grade of Zile Trade Vocational High School during 2011-2012 academic year. The research data was collected with the measurement tool (achievement test) developed by the researchers. The achievement test consists of three main and ten sub-sections and one open ended-question to see participants' attitude against methods used in this research. Participants studied 12 new words in L2 each through three methods (classic teaching, using realia, picture drawing). After learning sessions, participants took posttests immediately, after 1 week, and after 1 month. Experts' opinions were taken for validity assessment. **Reliability was determined by test-retest method. The data analyzed by using package program SPSS 15:00.** Results show that using realia has significant advantages over others. It is the most effective method among the others. Classic method is the second and picture drawing is the third one to learn new L2 vocabulary. Participants' attitudes also emerged that the using realia is the most effective method to learn new L2 vocabulary.

**Key words:** learning, foreign language, vocabulary teaching, teaching methods and techniques

## Introduction

Vocabulary teaching is an important part of language learning. The learning and retention of vocabulary during second language (L2) study is a significant process to perform the receptive (reading, listening) or productive (writing, speaking) skills successfully in the target language (Thight & Cohen, 2010). L2 learners need to have vocabulary and grammatical knowledge to use language in order to occur intended meaning ( Brisk, 2011, p. 47). To be able to determine a word's meaning to use contexts clues is an effective way (L.Crist, 2008, p.2 ).Vocabulary knowledge plays a very important role in content lessons. In language courses, learning can occur through four major kinds of tasks—experience tasks, shared tasks, guided tasks, and independent tasks (Nation & Webb, 2011, p.635). Each of the four major kinds of tasks draw on the same conditions for vocabulary learning. If these conditions are present, then vocabulary learning has a good chance of occurring. These conditions are; 1. *Motivation*: Motivation is a pre-requisite for attention. Tseng and Schmitt (2008,) point motivation of various kinds as being central to vocabulary learning. 2. *Repetition*: The more learners meet a word, the more likely they remember the new words. 3. *Four strands*: There is a balance of opportunities for learning. That is, there are opportunities for learning through meaning-focused input, meaning-focused output, language-focused learning, and fluency development. 4. *Thoughtful processing*: The learners have opportunities to notice, retrieve, or to make generative use of the vocabulary. 5. *Meaningful relationships*: To be able to gain and store new information this feature is important. ( Nation& Webb,2011, p.635)

There are several methods to teach L2 vocabulary. Teachers should choose the suitable method according to environmental conditions, level and need of class. Teachers may choose classic teaching method if they have a crowded class, or choose using realia if it is possible and choose using pictures or Picture drawing. Each of them has positive and negative ways. Researchers have different ideas about teaching L2 vocabulary.

A study by Elley (1989, Nation, 2011, p.445) showed that vocabulary learning was significantly increased by the teacher shortly noting words on the blackboard or by giving quick definitions or illustrations for the words. In different countries in many second language classrooms some elements of traditional approach persist, particularly those that are more teacher-led or focus on explicit explanations of the L2 grammar and learners' first language (L1)is used, bilingual vocabulary lists and memorization or translation between L1 and L2. (Jin & Cortazzi, 2011, p.558). According to Allen (1983,pp.24-28) many teachers like to use pictures the students themselves have made. Picture drawing have certain advantages; they cost little or nothing, they are available even in places where no other pictures can be found, they don't require space for storing and filling as pictures from other sources do, sometimes students who aren't good at language learning can draw well. Drawing exercises will give such students a chance to win praise, and praise may help those students to learn. But real objects are better than pictures whenever we have them in the calssroom. It should be better to use real objects whenever possible. Other authors have recognized the importance of the use of visuals as well. Schmitt (1997, Thight & Cohen, 2004) lists various visual components within his taxonomy of vocabulary learning strategies. In a study of 600 Japanese ESL learners of various ages and backgrounds, he found that 47% use pictures and gestures to discover a new word's meaning, and that 50% used images of a word's meaning as a way to remember it. The importance of visual is asserted by Sökmen (1997, Thight & Cohen,

2010) that material is more easily recalled when it has been learned with visual cues than when it has been learned with verbal cues alone.

### **Aim**

The aim of this study is to see the effects of various teaching methods on L2 vocabulary learning.

The following questions are tried to be answered.

- 1) What are the effects of various teaching methods on L2 vocabulary learning?
- 2) What are the effects of various teaching methods on L2 vocabulary retention in a short term (1 week) ?
- 3) What are the effects of various teaching methods on L2 vocabulary retention in a long term (1 month) ?
- 4) What are the attitudes of students towards various vocabulary teaching methods (using realia, classic method, Picture drawing)?

### **Material and Method**

#### **Participants**

The 10th grade students of Zile Trade Vocational High School (N=24) volunteered to participate in the current study.

#### **Limitations**

This study is limited with;

- 24 words chosen in English as a foreign language
- Three methods applied in this study
- 24 10th grade students of trade vocational high school

#### **Instrumentation**

In this study the instrumentation is developed by researchers. The instrument consists of 10 main and 3 subtitles and one open-ended question to measure attitude of students. The first main part consists of teaching three sets and taking 6 tests. Each set involves 8, totaling 24 new words in English. Learners studied a total of 24 English vocabulary items, divided equally into three sets of 8 words. All of the sets integrated the target language word, an elaboration of its meaning, and its Turkish equivalent. Students completed the translation task followed by the multiple-choice task. The ordering of tests in this way ensured that the multiple-choice task would not reveal any possible answers that could be used on the translation task. The tests include distractors to see whether students learn the new words or not. The same measurement was done 1 week and 1 month after all teaching sessions completed. These posttests included all 24 words and one open-ended question asking participants to indicate how they tried to remember the English words while taking the test. All vocabulary words from the study, along with their Turkish language equivalents, appear in Appendix A

#### **Procedure**

The current study was conducted over the course of 3 steps.

### **Step 1**

On step 1, students studied 24 new words with various teaching methods. Participants studied the words of set 1 through classic teaching, then they studied the words of set 2 through using realia, and the words of set 3 through picture drawing. During classic teaching, new 8 words were written on the board. Students repeated them and see the Turkish meanings on the board. During using realia, 8 real objects were put in the middle of the class. Their English meanings are written on gummed labels. Students looked at the objects, touched them and make sentences using new words. During Picture drawing, new words are given with a handout to the students. Both Turkish and English meanings were written on the handouts. Students were expected to draw new words. After the each teaching sessions completed immediate posttests took place, after the all teaching sessions completed posttest-1 took place. Students took the translation test followed by the multiple-choice test. The ordering of tests in this way ensured that the multiple-choice task would not reveal any possible answers that could be used on the translation task.

### **Step 2**

Step 2 of the study took place 1 week after step 1. Students completed the same two tasks as the immediate test but this step also included one open-ended question asking participants to indicate how they tried to remember the English words while taking the test.

### **Step 3**

Step 2 of the study took place 1 month after step 1. Students completed the same two tasks and answered the same open-ended question as posttest-1.

Each item answered correctly on the multiple-choice task was awarded one point, each item answered correctly on the translation task was awarded two points.

### **Statistical Analysis**

All data from the current study were entered into SPSS version 15.0 for statistical analysis. Experts' opinions were taken for validity assessment. Reliability was determined by test-retest method.

### **Findings**

In this part the findings of the study presented.

#### **What is the effect of various teaching methods on L2 vocabulary gain?**

This problem is integrated the target language word, an elaboration of its meaning, and its Turkish equivalent. Students completed the translation task followed by the multiple-choice task.

**Table 1**

**Teaching Methods and the Skores of Various Vocabulary Teaching Methods on L2 Vocabulary Gain (translation test)**

Methods	N	Mean Rank	df	X <sup>2</sup>	P
Classic teaching method	24	1,29	2	25.26	.000
Using realia	24	2,63			
Picture-drawing	24	2,08			

P<0.05

We see a meaningful difference among the vocabulary teaching methods. It is seen that students taught more L2 vocabulary by using realia method. The second one is Picture drawing and the third one is classic teaching method.

**Table 2**

**Teaching Methods and the Skores of Various Vocabulary Teaching Methods on L2 Vocabulary Gain (Multiple Choice Test)**

Method	N	Mean rank	df	X <sup>2</sup>	P
Classic teaching method	24	2.08	2	8.85	.012
Using realia	24	2.25			
Picture-drawing	24	1.67			

p<0.05

As seen Table 2, multiple choice test shows that using realia method is the most effective method to teach L2 vocabulary, the second one is classic teaching method and the third one is Picture drawing method.

**What is the effect of various teaching methods on L2 vocabulary retention in a short term?**

This problem is integrated the target language word, an elaboration of its meaning, and its Turkish equivalent. Students completed the translation task followed by the multiple-choice task.



**Table 3**

**Teaching Methods and the Skores of Various Vocabulary Teaching Methods on L2 Vocabulary Retention in a Short Term (1 Week) (Translation Test)**

Method	N	Mean rank	df	X <sup>2</sup>	P
Classic teaching method	24	1.69	2	18.98	.000
Using realia	24	2.67			
Picture-drawing	24	1.65			

P<0.05

As seen Table 3, the effect of various teaching methods on L2 vocabulary retention in a short term is assessed. There is a meaningful difference among vocabulary teaching methods in a short term. Using realia is the most effective method on L2 vocabulary retention according to translation test. Classic method is the second and Picture drawing is the third effective method on L2 vocabulary retention.

**Table 4**

**The Skores of Various Vocabulary Teaching Methods on Retention of New Words in a Short Term(1 Week) (Multiple Choice Test)**

Method	N	Mean rank	df	X <sup>2</sup>	P
Classic teaching method	24	2.10	2	22.22	.000
Using realia	24	2.56			
Picture-drawing	24	1.33			

P<0.05

As seen Table 4, the effect of various teaching methods on L2 vocabulary retention in a short term is assessed. Using realia is the most effective method on L2 vocabulary retention according to multiple choise test. Classic method is the second and Picture drawing is the third effective method on L2 vocabulary retention.

**What is the effect of various teaching methods on L2 vocabulary retention in a long term?**

This problem is integrated the target language word, an elaboration of its meaning, and its Turkish equivalent. Students completed the translation task followed by the multiple-choice task.

**Table 5**

**The Skores of Various Vocabulary Teaching Methods on Retention of New Words in a Long Term (1 Month ) (Translation Test)**

Method	N	Mean Rank	df	X <sup>2</sup>	P
Classic teaching method	24	1.96	2	25.35	.000
Using realia	24	2.69			
Picture-drawing	24	1.35			

P<0.05

As seen Table 5, the effect of various teaching methods on L2 vocabulary retention in a long term is assesed. Using realia is the most effective method on L2 vocabulary retention according to translation test. Classic method is the second and Picture drawing is the third effective method on L2 vocabulary retention.

**Table 6**

**The Skores of Various Vocabulary Teaching Methods on L2 Vocabulary Retentions in a Long Term (1 Month) (Multiple Choice Test)**

Method	N	Mean rank	df	X <sup>2</sup>	P
Classic teaching method	24	2.06	2	16,84	.000
Using realia	24	2.50			
Picture-drawing	24	1.44			

P<0.05

As it is before, again using realia is the most effective method on L2 vocabulary retention according to multiple test. Classic method is the second and Picture drawing is the third effective method on L2 vocabulary retention

“What are the attitudes of students towards various vocabulary teaching methods(using realia, classic method, Picture drawing)?”. This subproblem is tried to explain with that question:“Which method helped you to remember English words while taking the test “

**Table 7**

**Students' Attitudes Towards Vocabulary Teaching Methods**

Method	1 week		1 month	
	F	%	F	%
Classic teaching method	4	16,6	2	8,3
Using realia	15	67,5	20	83,3
Picture-drawing	5	20,6	2	8,3

Table 7 shows us students liked most using realia method and remember this method while taking tests after 1 week and 1 month later the teaching process completed. The second method student like is Picture drawing and classic method is the third one.

**Conclusion**

This research is aimed to define the effects of various teaching methods (classic teaching, using realia, picture-drawing ) on learning, short and long-term retention of new L2 vocabulary. After empirical studies results show that using realia is the most effective vocabulary teaching method on L2 vocabulary gain and retention. The least effective vocabulary teaching method on L2 vocabulary gain and retention is picture drawing. The open ended question given 1 week and 1 month later all teaching process completed also emerged that the using realia is the most effective method on L2 vocabulary gain and retention. Picture drawing isn't so effective as the others. This may be because of student's concentration on pictures rather than vocabulary gain.

These can be suggested; This study can be implemented on

1. Other class degrees and schools.
2. Different foreign languages
- 3 On different vocabulary methods

## References

1. Allen, V. F. (1983). *Techniques in Teaching Vocabulary*. Oxford American English
2. Brisk, M. E. (2011). Learning to Write in the Second language. In E. Hinkel (Ed), *Handbook of Research in Second Language Teaching and Learning*. Newyork&London: Routledge.
3. Demirel, Ö. (2007, Ağustos). *ELT Methodology*. Ankara: Pegem Akademi.
4. Demirel, Ö. (2011, Mart). *Yabancı Dil Öğretimi*. Ankara: Pegem Akademi.

### *Teaching Foreign Language*

5. F.Young, R. (2011). Interactional Competence in Language Learning, Teaching and Testing. In E. Hinkel (Ed), *Handbook of Research in second Language Teaching and Learning*. Newyork&London: Routledge.
6. Gardner, B., & Gardner, F. (2000) . *Classroom English*. Oxford University Press.
7. L.Crist, R. (2008). *SAT and ACT Vocabulary Building* . USA.
8. Jin, L., & Cortazzi, M. (2011). Re-Evaluating Traditional Approaches to Second language Teaching and Learning. In E. Hinkel (Ed), *Handbook of Research in Second Language Teaching and Learning*. Newyork&London: Routledge.
9. Nation , I.S.P & Webb, S. (2011). Content Based Instruction and Vocabulary Learning. In E. Hinkel (Ed), *Handbook of Research in Second Language Teaching and Learning*. Newyork&London: Routledge..
10. Senemoğlu, N. (2010, Mart). *Gelişim, Öğrenme ve Öğretim*. Ankara: Pegem Akademi.
11. Slattery, M. (2004). *Vocabulary Activities*. Oxford University Press.
12. Thight, D., & Cohen, A. (2004). *Picture Drawing, Learning Style, And The Long-Term Retention Of Second Language Vocabulary*.

Gülay BEDİR:

Bachelor's Degree: İnönü University in Malatya (1998).

Master Degree: Erciyes University in Kayseri (2003)

Ph. D. Degree: İnönü University Malatya (2007)

At present: Asst. Prof in Gaziosmanpaşa University Faculty of Education, Turkey

Field of Interest: Active Learning, Learning Style, Peace Education, Teaching, Instruction.

Sevgi BEKTAŞ BEDİR:

Bachelor's Degree: English Language Teaching, Education Faculty, Ondokuz Mayıs University, Turkey (2007)

Postgraduate(master): Education Programs and Teaching, Gaziosmanpaşa University, Turkey

At present: English Language Teacher, Tokat, Turkey

Field of Interest: Language Teaching, L2 Acquisition, Learning Style

### Appendix\_A

Set 1	Set 2	Set 3
<i>1. arrow=&gt;ok</i> <i>2. rag =&gt;bez parçası</i> <i>3. magnet=&gt;mıknatıs</i> <i>4.shovel=&gt;kürek</i> <i>5.needle=&gt;iğne</i> <i>6.envelope=&gt;zarf</i> <i>7.shoelace=&gt;ayakkabı bağı</i> <i>8.handkerchief=&gt;mendil</i>	<i>1.rope=&gt;ip</i> <i>2.stamp=&gt;pul</i> <i>3.frame=&gt;çerçeve</i> <i>4.hammer=&gt;çekiç</i> <i>5.coin=&gt;madeni para</i> <i>6.tray=&gt;tepsi</i> <i>7.calendar=&gt;takvim</i> <i>8.grater=&gt;rende</i>	<i>1)blanket=&gt; yorgan</i> <i>2) pan =&gt;tencere</i> <i>3)helmet =&gt;kask</i> <i>4) crown=&gt; taç</i> <i>5)colander =&gt;süzgeç</i> <i>6) case=&gt; bavul</i> <i>7) flowerpat=&gt; saksı</i> <i>8)comb=&gt; tarak</i>

# Long Run Macroeconomic Determinants of Public Capital Spending in Nigeria

---

***Benjamin Ayodele Folorunso (Ph.D)***

*Department of Economics, Faculty of Social Sciences*

*Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria*

*E-mail: [bfolorun@oauife.edu.ng](mailto:bfolorun@oauife.edu.ng) or [bfolorunso2002@yahoo.com](mailto:bfolorunso2002@yahoo.com)*

## **Abstract**

The paper examined the long-run macroeconomic determinants of public capital spending in Nigeria by employing time series data from 1970 to 2009 and sourced for data mainly from the Statistical Bulletins published by the Central Bank of Nigeria and IFS year books of the IMF. The time series properties and the existence of cointegration among the time series employed were tested and it was found that public capital spending series and its identified macroeconomic determinants were first difference stationary except for macroeconomic uncertainty indicators. It was also confirmed that long run relationship existed between public capital spending and the identified macroeconomic determinants. Macroeconomic uncertainty indicators and public debt servicing were found to have portended significant negative effect on the level of public capital spending. The paper concluded that real income, domestic and foreign private investment, credit to the public sector, public debt servicing, foreign aid, trade openness and macroeconomic uncertainty indicators are the long run macroeconomic determinants of public capital spending in Nigeria.

**Keywords:** Public Capital Spending, Macroeconomic Uncertainty, Time Series Analysis, Public investment, Macroeconomics, Cointegration, Nigeria.

## **I Introduction:**

Public capital spending (PCS), otherwise known as public investment, has been strongly described as an engine of growth in the economic literature (Ram, 1986a; Barro, 1990; Lin, 1994; Mallick, 2002; Romp and de Haan, 2005; Sturm and de Haan, 2005; Folorunso and Olayeni, 2006). This view is connected with the evidence that larger public capital spending is positively and significantly correlated with economic growth (Ram, 1986b; Aschauer, 1989; Romer, 1989; Ram, 1996; Sanchez-Robles, 1998; Bose, Haque and Osborn, 2003; Esfahani and Ramirez, 2003; Fan and Rao, 2003). Some other authors disagree as they reported negative relationship between public investment and economic growth across countries (Landau, 1983; Grier and Tullock, 1989; Barro, 1991; Gwartney, Holcombe and Lawson, 1998). The general consensus in the literature, however, is that the relationship between government capital spending and economic growth is significantly positive in many developing countries while it is negative in many developed countries (Terasawa and Gates, 1998; Romp and de Haan, 2005).

Evidence abounds in the literature that public capital spending either *crowd-in* or *crowd-out* private capital spending. The general consensus, however, is that public expenditure, especially capital component, stimulates private investment thus generating employment opportunities with the ultimate goal of reducing poverty and promotion of rapid economic growth (Blejer and Khan, 1984; Balassa, 1988; Greene and Villanueva, 1991; Oshikoya, 1994; Serven, 1996; de Oliveira and Teixeira, 1999; Everhart and Sumlinski, 2001; Mallick, 2002; Atukeren, 2005a). Major evidence from the literature is that the likelihood of the crowding-in effect of public investment is higher in countries with a stable macroeconomic environment (Atukeren, 2005b).

Though public capital spending has important role to play in the private investment recovery and growth in developing countries, much attention has only been paid both theoretically and empirically on the determinants of private investment with lesser attention been paid to those factors, especially macroeconomic factors, which determine the size of public capital expenditure in these countries. Thus, the issue agitating the mind of researchers in recent time is what factors determine the level of public spending, more importantly the capital component, in an economy. Although Domar (1957) opines that public expenditure behaviour is the most troublesome of the three forms of aggregate expenditure (demand) simply because there is no economic theory to explain public spending behaviour as we have for consumer and producer spending behaviour, the paper is of the opinion that public capital spending behaviour which stimulates growth should be modeled, determined and explained from macroeconomic economic point of view.

Nigeria, a developing country, in its effort to develop rapidly and reduce poverty as well as achieving other Millennium Development Goals (MDGs) requires a substantial recovery in private capital (Chhibber and Pahwa, 1994) as well as substantial increase in public capital spending (Folorunso and Olayeni, 2006). The achievement of rapid and sustainable economic growth in Nigeria could therefore be strongly linked with increased public capital spending which crowd-in private capital spending (Usman, Mobolaji, Kilishi, Yaru and Yakubu, 2011; Nworji, Okwu, Obiwuru and Nworji, 2012). However, public capital spending as a share of aggregate national income has been on the decline persistently from 1970 to 2009 (CBN, 2011).

A cursory look at Figure 1 shows that PCS as a proportion of GDP was on the increase but below 10.0 per cent throughout the first half of 1970s with an annual real economic growth rate of 3.5 per cent. The increase in the proportion continued in the second half of 1970s with a record of 15.9 per cent in 1977 with an annual real economic growth rate of 5.4 per cent. The increase in the proportion was, however, short-lived in the first half of the 1980s. Except for 1980 when the proportion increased to its highest record of 20.5 per cent, the proportion dropped drastically to a record of 8.0 per cent in 1985 with an annual real economic growth rate of 5.0 per cent. The decline persisted during the second half of the 1980s with a record of 6.9 per cent in 1989 with the real economic growth rate of 4.0 per cent. In the 1990s, the ugly scenario persisted with a record far below 10.0 per cent in most years except for year 1998 and 1999 with a record of 11.4 per cent and 15.6 per cent respectively and annual economic growth record of 3.2 per cent. The PCS trend became worse as its proportion of GDP deteriorated to a level below 5.0 per cent for all years in the 2000 with annual real economic growth record of 3.0 per cent (CBN, 2011).

It is evident from Figure 1 that public capital spending as a share of aggregate national income in Nigeria accounts for less than 20.0 per cent and has a downward trend from 1970 to 2009 which is detrimental to the achievement of MDGs. Similar downward trend in public capital spending has also been observed for many other developing countries in the recent time. This development has led to some attempts at modeling public capital spending for some countries in recent time. Many of these studies focus on the causes of the decline in public capital spending in OECD and less-developed countries. The results of most studies reveal that macroeconomic variables are strong and significantly related to public capital spending in these countries with little support for politico-institutional factors (Randolph, Bogetic and Heffley, 1996; Sturm, 1998a, 1998b and 2001; Fan and Rao, 2003; Atukeren, 2005b; Ismihan, Meltin-Ozcan and Tansel, 2005; Mehrotra and Väililä, 2006).

The paper is of the view that the causes of the downward trend characteristics of the public capital spending behaviour in the country should not be left unexplained as it has been carried out for some other developing countries, especially from macroeconomic point of view. One major issue that is of paramount importance is to determine the role that macroeconomic uncertainty has played in public capital spending as the issue has not been extensively discussed in the literature. The paper therefore, fills the gap by empirically identifies those long run macroeconomic determinants of public capital spending in country and establishes the role of macroeconomic uncertainty thus complementing the existing empirical literature on the issue.

The rest of the paper is organized as follows: Section II presents a brief review of the existing literature on the determinants of public capital spending focusing mainly on those studies that examine causes of decline in public capital spending witnessed in many developing countries in recent time. Section III discusses the model and the methodology adopted in the study while Section IV presents the empirical results from the long run dynamic models estimated. Section V concludes the paper.

## **II Review of the Literature:**

Several authors have discussed extensively on the importance of public expenditure, especially capital expenditure, in promoting accelerated economic growth in many countries indicating that causality runs from public spending to economic growth.



This finding has been confirmed for many countries of the world, especially developing countries (Gupta, 1967; Goffman and Mahar, 1971; Mann, 1980; Singh, 1997; Sahoo, 2001) which supports Wagner's law that posits that causality is uni-directional running from public spending to aggregate income (Wagner, 1883). Some other studies found no empirical support for the existence of Wagner's law (Wagner and Weber, 1977; Demirbas, 1999; Bagdigen and Cetintas, 2003; Yuk, 2005; Babatunde, 2008). Though there seems to be no consensus on the direction of causation, the consensus, however, is that the relationship between public spending and economic growth is significantly positive.

With the ongoing controversy some other studies in Nigeria have attempted to confirm the existence of Wagner's law and causal relationship between public spending and economic growth. For instance, Olomola (2004) investigated the validity or otherwise of Wagner's law by adopting co-integration techniques on Nigerian time series data over the period 1970 to 2001 and confirmed that economic growth Granger-caused public spending in both the short and long run. Also, Folorunso and Olayeni (2006) adopted Granger causality and error correction mechanism techniques on Nigeria's data and showed that economic growth, measured by the growth rate of GDP, Granger-caused growth in public sector spending while the opposite causality was not established. The finding of both studies also indicated a positive relationship between economic growth and public expenditure in the country. Hence, income series could be an important factor influencing public spending in the country.

The above-reviewed studies on Nigeria, however, failed to disaggregate public spending into recurrent and capital component for better clarification and understanding of the causality issue and the existence of Wagner's law. Several authors have argued that public expenditures in physical and human infrastructure are the outlays that are significantly associated with rapid economic growth (Bose *et al*, 2003; Atukeren, 2005a and b) while recurrent expenditures do not. Coming from this background, the paper focuses on the capital spending component and examine those macroeconomic factors that impact significant influence on its size. Linking this fact to the already established Wagner law's existence in the country, it is opined that state of the economy as measured by the level of economic growth is major determinant of public capital spending.

Several other studies have also examined the determinants of PCS and particularly declining trend experienced in many developing countries of the world. Among the economic factors identified for many countries are the level of private investment, foreign aid and fiscal deficits. For instance, Sturm (1998b) and Sturm (2001) observed that in a great majority of countries throughout the world, productive government services had declined as percentage of GDP since the 1970s and identified those factors responsible for the decline in public capital spending in these countries and also tested various hypotheses that might have explained the development of government capital spending using panel data for 123 non-OECD countries for the period 1970-1998. The paper found that politico-institutional variables, like ideology, political cohesion, political stability and political business cycles do not seem to be important when explaining government capital formation in less-developed economies while macroeconomic variables like public deficits, private investment and foreign aid are significantly related to public capital spending.

The adoption of structural adjustment and or poverty reduction programme by most countries has also been identified as one of the reason for PCS trend. Indeed, Randolph, Bogetic and Hefley (1996) argued that governments that are not committed to alleviating poverty or that are extremely committed to it spend less from the central budget on infrastructure while those with only limited commitment to alleviating poverty adopt strategies to increase the productivity of the poor by investing in infrastructure. The paper explained further that as governments' commitment intensifies, their strategy shifts to improving human capital or strengthening the social safety net, and funding for social programme competes with funding for infrastructure.

In a similar study, Fan and Rao (2003) reviewed trends in government expenditures in the developing countries and reported that economic adjustment programme embarked upon by many developing countries was responsible for the decline experienced in public spending. The paper found that structural adjustment programmes increased the size of government spending in some sectors while some other sectors witnessed declining trend. As a share of total government spending, expenditures on agriculture, education, and infrastructure in Africa; on agricultural and health in Asia; and on education and infrastructure in Latin America, all declined as a result of the structural adjustment programs.

Atukeren (2005a and 2005b) employed a multivariate probit model to analyze the determinants of the crowding-in effects of public investments in a sample of 25 developing countries by accounting for the developments in their economic, political, and legal structures. The political-economic model included the initial level of per capita income, access to domestic credit, macroeconomic uncertainty, the change in the foreign debt service ratio, and the change in the government size. Furthermore, some proxies for the degree of checks and balances in the political power structure and the changes in the legal environment of business were included. The paper also highlighted the importance of ensuring accountability and good governance in undertaking public investments with cross-section data range covering the period between 1975 and 2000. The model successfully predicted all 18 cases of no-crowding-in and six out of seven cases of crowding-in. The estimation results showed that the likelihood of the crowding-in effects of public investments is higher in countries with a stable macro environment and for those countries which reduced the overall size of their government sector while increasing the level of public fixed capital investments. It was also found that the likelihood of the public investments to crowd in private investments increases with the availability of domestic credit, and as the foreign debt service burden decreases.

Ismihan, Metin-Ozcan and Tansel (2005) investigated the empirical relationship between macroeconomic instability, public and private capital accumulation and growth in Turkey over the period 1963-1999. Adopting co-integration and impulse response analysis, the paper suggested that the chronic and increasing macroeconomic instability of the Turkish economy had seriously affected her capital formation and growth. Thus, chronic macroeconomic instability seems to be a serious impediment to public investment, especially to its infrastructural component, and shattered, or even reversed, the complementarity between public and private investment in the long run. Tanzi and Davoodi (1997) and Everhart and Sumlinski (2001) have also found a detrimental effect of corruption on public capital spending in most developing countries. The evidence shows that corruption increases public investment while reducing its productivity.

Mehrotra and Vällilä (2006) described the evolution of public investment and public capital stocks in Europe over the past three decades and also analyzed the macroeconomic determinants of public investment, with a special focus on its long-term trend. The paper found that public investment had been determined by national income, the stance of budgetary policies and fiscal sustainability considerations. The paper concluded that the significant downtrend that characterizes the evolution of public investment in non-cohesion countries is chiefly determined by drawn-out episodes of fiscal consolidation, unrelated to European Monetary Union (EMU).

The macroeconomic determinants of public capital spending are in-exhaustive as the influences of several other economic variables were omitted in the reviewed literature above. However, Mourao (2007) identified some other economic determinants that explain the growth of Portuguese public expenditures since the end of 2<sup>nd</sup> World War. Using cointegration techniques, the paper found the number of unemployed people, number of public employees, rate of openness and current transfers per capita as major determinants among the wider set suggested by the literature.

The review of existing literature confirmed the non-existence of Wagner hypothesis for many countries including Nigeria which indicates strongly that the growth rate of aggregate national income is an essential factor influencing the growth rate public spending. However, the attention of researchers on the issue was on total public expenditure without emphasis on capital component of public spending. It is argued that capital spending, rather than recurrent, exerts significant influence on an economy. In addition, it is observed that most studies employed cross section analyses when examining what accounted for the downward trend in PCS in developing countries in recent time, the paper is of the view that studies of this nature should focus on time series behavior of public capital spending in a specific country for as long the time period as possible rather than on a cross-section of countries at different income levels. In addition, the role of macroeconomic uncertainty has not been extensively discussed in the literature. The paper fills these gaps by determining those macroeconomic factors responsible for such an ugly and downward trend in public capital spending in Nigeria.

### **III Model Specification and Estimation Techniques:**

The model is developed from the demand side theory of public sector spending with the assumption of the neutrality of public agents. Wagner (1883) argued that public goods (here, capital goods) are characterized by higher income elasticities indicating that with rising aggregate real national income, public capital spending tends to rise and vice versa. Thus, with ample evidence from the literature, the common exogenous variable assumed to explain the growth of public capital spending (*pcs*) is the aggregate real national income (*rgdp*) [Olomola, 2004; Folorunso and Olayeni, 2006; Mehrotra and Vällilä, 2006; Babatunde, 2008]

Also, the empirical literature affirms that public capital spending is affected by three different set of explanatory variables; structural (such as degree of urbanization and population growth), political (such as political instability and change or size of government) and economic variables. Since the focus of the paper is on macroeconomic determinants, in addition to aggregate real national income (*rgdp*), the macroeconomic factors identified from the literature include; aggregate private domestic investment (*pinv*), foreign private investment (*fpi*), foreign aid (*faid*) [Sturm, 1998; Sturm 2001], domestic credit to the public sector (*pcre*), public debt (*debt*) or debt servicing (*debtser*)

[Atukeren (2005a and 2005b)] trade openness (*open*) [Mourao, 2007], corruption perception index (*cpi*) [Tanzi and Davoodi, 1997; Everhart and Sumlinski, 2001], economic adjustment programme or policy shift dummy (*sap*) [Randolph *et al.*, 1996; Fan and Rao, 2003] and a measure of macroeconomic uncertainty (*munc*) [Atukeren, 2005a; Ismihan, *et al.* 2005] which can be proxied by the inflation rate uncertainty (*muncinf*), exchange rate uncertainty (*muncexr*), nominal economic growth uncertainty (*muncngdp*) and budget deficit or fiscal balance uncertainty (*muncfbal*). The model to be estimated in function form is thus expressed as follows:

$$pcs = f(rgdp, pinv, fpi, pcre, faid, open, debtser, cpi, sap, munc) \dots\dots(1)$$

All variables in equation (1) are expressed using the natural logarithm form, except for credit to the public sector (due to some negative values), foreign aid (measured a ratio of gross national income), trade openness, macroeconomic uncertainty indicator, corruption perception index and policy regime dummy which are all in ratio and rate forms. Expressing equation (1) in linear semi-logarithmic form and dropping corruption perception index variable (due to the paucity of data for the sample period), the model thus estimated is specified as follows:

$$\begin{aligned}
 lpcs_t = & \beta_0 + \beta_1 lrgdp_t + \beta_2 lpinv_t + \beta_3 lfpi_t + \beta_4 pcre_t + \beta_5 faid_t + \beta_6 open_t \\
 & + \beta_7 ldebtser_t + \beta_8 sap_t + \beta_9 munc_t + e_t \dots\dots\dots(2) \\
 \beta_1 > 0, & \beta_2 > 0, \beta_3 > 0, \beta_4 > 0, \beta_5 > 0, \beta_6 > 0, \beta_7 < 0, \beta_8 < 0, \beta_9 < 0
 \end{aligned}$$

In order to avoid spurious regression, the time series properties of variables in equation (2) were first examined through the use of Augmented Dickey-Fuller (ADF) and Philip-Perron (PP) tests with intercept and trend included in the estimation. The unit root test was followed by cointegration test to confirm if long run relationship existed between public capital spending and the identified macroeconomic determinants during the period from 1970 to 2009. Finally, the co-integration test was followed by the estimation of error correction models (ECM) in which both the short-run and long-run relationships were determined. Data were gathered mainly from the Statistical Bulletins published by the Central Bank of Nigeria and International Financial Statistics Year Books published by the International Monetary Fund. The results of the unit root, cointegration tests and parsimonious ECM models estimated are presented in section IV.

**IV Analysis and Interpretation of Results:**

The results as presented in Table 1 indicate that public capital spending (*lpcs*) series is stationary at first-difference. Similarly, the identified macroeconomic determinants series of public capital spending which include real income (*lrgdp*), private investment (*lpinv*), foreign private investment (*lfpi*), credit to the public sector (*pcre*), debt (*ldebt*) or debt service (*ldebtser*) and trade openness (*open*) series fail to achieve stationarity at levels except when differenced once [i.e., they are I(1) series] but foreign aid (*faid*) and all indicators of macroeconomic uncertainty; inflation rate uncertainty (*muncinf*), exchange rate uncertainty (*muncexr*), nominal economic growth uncertainty (*muncngdp*) and fiscal balance uncertainty (*muncfbal*) series exhibit stationarity at levels [i.e., they are I(0) series].

The unit root test results imply that all I(1) series have to be differenced once before they achieve stationarity while I(0) series do not require any differencing. The result of I(1) series indicates that differencing public capital spending and its identified macroeconomic determinants series once was necessary in estimating the model of public capital spending and macroeconomic determinants as specified in equation (2) in order to remove spurious results. However, such first differencing estimation could only explain short-run relationships and in order to capture the long-run relationships cointegration tests were conducted and the results reported in Table 2.

Table 2 presents the results of cointegration test employed to determine whether long-run relationship between public capital spending and the identified macroeconomic determinants exists or not. Results of the unit root test conducted on residuals terms (*ecm*) of the four cointegrated models are reported in the lower part of Table 2. Model A, B, C and D represent the long run relationships with inflation rate uncertainty (*muncinf*), exchange rate uncertainty (*muncexr*), nominal economic growth uncertainty (*muncngdp*) and fiscal balance uncertainty (*muncfbal*) series respectively. The result clearly shows that public capital spending (*lpcs*) indeed cointegrated with real income (*lrgdp*), private investment (*lpinv*), foreign private investment (*lfpi*), credit to the public sector (*lpre*), debt servicing (*ldebtser*), foreign aid (*lfaid*), trade openness (*lopen*), structural adjustment policy (*lsap*) and macroeconomic uncertainty indicator (*lmuncf*) series at 1 per cent level of significance. The implication of this result is that public capital spending has long-run relationship with these identified macroeconomic variables and indeed, the modeling of public capital spending has to follow an error correction mechanism (ECM). The results of parsimonious ECM models, which combine both the short-run and long-run properties, are thus reported in Table 3.

Table 3 presents ECM parsimonious models which combine short run and long run relationships of public capital spending and its macroeconomic determinants identified in equation (1). The results of ECM models reported in Table 3 clearly indicate a well-defined lagged error correction term [*ecm*(-1)] which indicates a feedback between 0.50 and 0.80 of the past level's disequilibrium from the long run elasticity of public capital spending in Nigeria. The effects of these "disequilibrium" error corrections, though less than unity, have expected negative sign. The strong significance of the coefficient of lagged-ECM thus supports the earlier findings that public capital spending, in fact, cointegrated with identified macroeconomic determinants. This could mean that long-run relationship exists between public capital spending (*pcs*) and real national income (*rgdp*), private investment (*pinv*), foreign private investment (*fpi*), credit to the public sector (*pre*), debt servicing (*debtser*), foreign aid (*faid*), trade openness (*open*), structural adjustment policy (*sap*) and macroeconomic uncertainty indicator (*munc*) series.

The coefficient of determination ( $R^2$ ) is as high as 0.59 for the four models which indicate that the overall explanatory powers of the models are fairly high given the characteristics of short run relationships but far below the values obtained by Sturm (1998b and 2001). The low value of  $R^2$  could be attributed to the omission of structural and political variables as captured in some other studies. The F-statistics for the models also show that the public capital spending series and the identified macroeconomic determinants are, indeed, linearly related which indicates that there is no misspecification error in all the estimated models. Durbin-Watson (DW) statistics also show

no evidence of autocorrelation. Thus, the results and inferences drawn from these analyses are expected to be reliable.

As regards the short run influences, the coefficients of the lagged value of public capital spending [ $lpcs(-1)$ ] produce mixed results. In model 1 and 3, it portends negative effect while in model 2 and 4 it possesses positive effect. It is, however, confirmed that both results were not statistically significant at 5 per cent level of significance. This implies that past value of public capital spending does not influence the current public capital spending in the short run. Similarly, the coefficients of the current value of real income ( $lrgdp$ ) and lagged value of real income [ $lrgdp(-1)$ ] produce mixed results. In model 2 and 4, the current level portends negative and positive effect respectively while in model 1 and 3 it possesses negative and positive effect respectively though both results were not statistically significant at 5 per cent level of significance. The result could mean that real income has no short run influence on current public capital spending in Nigeria.

In all the models current level of domestic private investment ( $lpinv$ ) was found to have positive influence but statistically insignificant at 5 per cent while past level of private investment [ $lpinv(-1)$ ] portended insignificant negative effect in model 2, 3 and 4. Similarly, past level of foreign private investment [ $lfpi(-1)$ ] bear an insignificant negative effect of on public capital spending in all models while in model 2 and 4 the current level of foreign private investment ( $lfpi$ ) bears insignificant positive effect. The results indicate that levels of both the domestic and foreign private investment do not influence public capital spending in the short run.

The coefficients of current level of credit to the public sector ( $pcr$ ) in all models bear the expected positive sign in all models. This result is also confirmed for the coefficients of the lagged credit to the public sector [ $prec(-1)$ ]. However, in all models, none of the coefficients is statistically significant at 5 per cent level of significance. Perhaps, availability of credit to the public sector could probably increase the level of public capital spending in the short run, though its effect is not statistically significant.

The short run effects of current and lagged levels of foreign aid were found to be insignificant. In all the models, lagged levels of foreign aid [ $faid(-1)$ ], though positive, were insignificant while the negative influence of current level of foreign aid ( $faid$ ) was reported in model 2 but insignificant at 5 per cent level of significance. The implication of this result is that foreign aid portends insignificant positive effect on the level of public capital spending in the short run.

The measures of trade openness ( $open$ ) exhibited positive signs which were in harmony with theoretical expectation. The coefficients of its current levels are positively signed in model 2, 3 and 4 and its lagged values [ $open(-1)$ ] are also positively signed in model 1, 2 and 3. However, in all these models, the degree of trade openness was insignificant at 5 per cent level of significance and could be interpreted that openness has positive but insignificant short run effect on public capital spending in the country.

The current level of public debt servicing ( $debtser$ ) and lagged level of public debt servicing [ $debtser(-1)$ ] portended negative effects on public capital spending in the country. This result is in consonance with the expected sign indicating that higher debt servicing is detrimental to public capital spending. However, only the lagged value of public debt servicing bears a significant negative effect at 5 per cent level of significance, as reported in model 1 and 4, but insignificant effect in model 2 and 3. Also, the current

value of public debt servicing, though with negative sign, was not statistically significant in all the models.

Macroeconomic uncertainty was also found to have detrimental effect on the level of public capital spending. All indicators of macroeconomic uncertainty portended negative effect in all models. The current level of inflation rate uncertainty (*muncinf*), current level of nominal income growth uncertainty (*muncngdp*) and the lagged level of fiscal balance uncertainty [*muncfbal*(-1)] were found to have significant positive effect at 5 per cent level of significance, as reported in model 1, 3 and 4 respectively, while the lagged level of exchange uncertainty [*muncexr*(-1)], as reported in model 2 bears an insignificant negative effect. This finding could be interpreted that, in the short run, macroeconomic instability is one key determinant of public capital spending in the country.

However, the measure of structural adjustment policy (*sap*) indicated insignificant negative effect on the public capital spending in the short run as reported in all models. The reported negative sign of the coefficient of policy regime shift conform to *a priori* sign and the finding of Fan and Rao (2003). The implication of this finding is that structural adjustment programme in the country has dampened the level of capital spending by the public sector.

## V CONCLUSION:

The paper identified real national income, domestic and foreign private investment, credit to the public sector, debt servicing, foreign aid, trade openness, structural adjustment programme and macroeconomic uncertainty indicators as the long run determinants of public capital spending in Nigeria. High public debt servicing and macroeconomic uncertainty were also found, in the short run, to be detrimental to the public capital spending required to spur rapid economic growth in the country. The increasing macroeconomic instability experienced in Nigeria during 1970 – 2009 sample period seriously dampened public capital spending in the country. Macroeconomic uncertainty resulting from uncertain economic policies of the government was a grave impediment which also accounted for the downward trend of public capital spending in the country. This scenario might have altered the complementarity between public and private capital spending in Nigeria.

The paper, thus, concluded that incessant macroeconomic policy uncertainties should be checked for public capital spending to yield its fruitful results while measures to stimulate economic growth should be intensified in order to improve the present quality of public capital spending in the country so as to achieve the Millennium Development Goals. Indeed, commodity and factor price stability, exchange rate stability, deposit and lending rates of interest stability should be pursued with appropriate mix of both monetary and fiscal measures.

However, the paper failed to consider the role of corruption perception index in the determination of public capital spending in the country. Although many studies had found that high level of corruption is detrimental to economic growth and public capital spending in many countries, the paper did neglected this issue due to paucity of data thus partially accounted for low values of coefficient of determinations in all the models. The paper is of the view that there are more economic variables that were not captured and this issue is left for future research in this area. More importantly, structural and political variables interact with economic variables in the determination of the value of capital

spending by the public sector. It is, therefore, suggested that future research studies in this area should address these neglected issues.



**References:**

- Aschauer, D.A. (1989): "Is Public Expenditure Productive?", *Journal of Monetary Economics*, Vol.23, pp.177-200.
- Atukeren, E. (2005a): "Interactions between Public and Private Investment: Evidence from Developing Countries", *Kyklos*, Vol.58, Vol.3, pp.307-330.
- Atukeren, E. (2005b): "Economic and Institutional Determinants of the Crowding-in Effects of Public Investments in Developing Countries", *Swiss Institute for Business Cycle Research (KOF / ETH Zürich) WEH - ETH Zentrum*, CH-8092 Zurich, Switzerland.
- Babatunde, M.A. (2008): "Establishing Wagner's Law in the West Africa Monetary Zone (WAMZ): Investigation Using the Bounds Test", *The Indian Economic Journal*, Vol.56, No.3, pp.109-123.
- Bagdigen, M. and Cetintas, H. (2003): "Causality between Public Expenditure and Economic Growth: The Turkish Case", *Journal of Economic and Social Research*, Vol.6, No.1, pp.53-72.
- Balassa, B. (1988): "Public Finance and Economic Development", *World Bank Working Paper No.31*, Washington, D.C.
- Barro, R.J. (1990): "Government Spending in a Simple Model of Endogenous Growth", *Journal of Political Economy*, Vol.98, No.5, S103-25.
- Barro, R. J. (1991): "Economic Growth in a Cross-Section of Countries", *Quarterly Journal of Economics*, Vol.106, No.2, pp.407-441.
- Blejer, M., and Khan, M. (1984): "Government Policy and Private Investment in Developing Countries", *IMF Staff Papers* 31, No.2, Washington, D.C., pp.379-403.
- Bose, N., Haque, M., and Osborn, D. (2003): "Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries", *Centre for Growth and Business Cycle Research Discussion Paper Series No.30*, University of Manchester.
- Central Bank of Nigeria (2011): "CBN Statistical Bulletin", Vol.22, No.2, December 2011.
- Chhibber, A. and Pahwa, S. (1994): "Investment Recovery and Growth in Nigeria: The Case for Debt Relief", in *African Debt Burden and Economic Development*, NES Selected Papers for the 1994 Annual Conference, pp.115-140.

Demirbas, S. (1999): "Cointegration Analysis-Causality Testing and Wagner's Law: The Case of Turkey, 1950-1990", *Discussion Papers in Economics*, Department of Economics, University of Leicester, U.K.

de Oliveira, C.B and Teixeira, J.R. (1999): "The Impact of Public Investment on Private Investment in Brazil, 1947-1990", *CEPAL Review* 0(67), pp.75-84.

Domar, E.D. (1957): *Essays in the Theory of Economic Growth*, Macmillan

Esfahani, H.S. and Ramirez, M.T. (2003): "Institutions, Infrastructure and Economic Growth", *Journal of Development Economics*, Vol.70, pp.443-477.

Everhart, S.S. and Sumlinski, M.A. (2001): "Trends in Private Investment in Developing Countries: Statistics for 1970-2000 and the Impact on Private Investment of Corruption and the Quality of Public Investment", *International Finance Corporation Discussion Paper No. 44*, The World Bank, Washington, D.C.

Fan, S. and Rao, N. (2003): "Public Spending in Developing Countries: Trend, Determination and Impact", *EPTD Discussion Paper No. 99*, Washington, D.C.: International Food Policy Research Institute.

Folorunso, B.A. and Olayeni, O.R. (2006): "Public Expenditure and Economic Growth: Causal Evidence from Nigeria (1970-2003)", *Ife Social Science Review*, Vol.20, No.1, pp.57-65.

Goffman, I.J. and Mahar, D.J. (1971): "The Growth of Public Expenditures in Selected Developing Nations: Six Caribbean Countries 1940-65", *Public Finance*, Vol.26, No.1, pp.57-74.

Greene, J. and Villanueva, D. (1991): "Private Investment in Developing Countries: An Empirical Analysis", *IMF Staff Papers* 38, No.1, Washington, D.C., pp.33-58.

Grier, K.B. and Tullock, G. (1989): "An Empirical Analysis of Cross-National Economic Growth, 1951-80", *Journal of Monetary Economics*, Vol.24, No.2, pp.259-276.

Gupta, S.P. (1967): "Public Expenditure and Economic Growth: A Time Series Analysis", *Public Finance*, Vol.22, No.4, pp.423-461.

Gwartney, J., Lawson, R. and Holcombe, R. (1998): "The Scope of Government and the Wealth of Nations", *Cato Journal*, Vol.18, No.2, pp.193-190.

Ismihan, M., Metin-Ozcan, K. and Tansel, A. (2005): "The Role of Macroeconomic Instability in Public and Private Capital Accumulation and

- Growth: The Case of Turkey 1963-1999”, *Applied Economics*, Vol.37, No.2 (February), pp.239-251.
- Landau, D.L. (1983): “Government Expenditure and Economic Growth: A Cross-Country Study”, *Southern Economic Journal*, Vol.35, pp.783-792.
- Lin, S.A.Y. (1994): “Government Spending and Economic Growth”, *Applied Economics*, Vol.26, pp.83-94.
- Mallick, S.K. (2002): “Determinants of long-term growth in India: a Keynesian approach”, *Progress in Development Studies*, Vol.2, No.4, pp.306–324.
- Mann, A.J. (1980): “Wagner’s Law: An Econometric Test for Mexico, 1925-76”, *National Tax Journal*, Vol.33, No.2, pp.189-201.
- Mehrotra, A. and Väilä, T. (2006): “Public Investment in Europe: Evolution and Determinants in Perspective”, *The Journal of Applied Public Economics*, Vol.27, Issue.4 (December), pp.443-471.
- Mourao, P.R. (2007): Long-Term Determinants of Portuguese Public Expenditures”, *International Research Journal of Finance and Economics*, Issue 7, pp.153-167.
- Nworji, I. D., Okwu, A. T., Obiwuru, T. C. and Nworji, L. O. (2012): “Effects of public expenditure on economic growth in nigeria: a disaggregated time series analysis”, *International Journal of Management Sciences and Business Research*, Vol.1, Issue 7, pp. 1 – 15.
- Olomola, P.A. (2004): “Cointegration Analysis, Causality, Testing and Wagner’s Law: The case for Nigeria (1970-2001)”, *Journal of Social and Economic Development*, Vol.6, No.1, pp.76-90.
- Oshikoya, T.W. (1994): “Macroeconomic Determinants of Domestic Private Investment in Africa: An Empirical Analysis”, *Economic Development and Cultural Change*, Vol.42, No.3, pp.573-596.
- Ram, R. (1986a): “Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time-Series Data”, *American Economic Review*, Vol.76, No.1, pp.109-203.
- Ram, R. (1986b): “Causality between Income and Government Expenditure: A Broad International Perspective”, *Public Finance*, Vol.41, No.3, pp.393-414.
- Ram, R. (1996): “Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time-Series Data”, *American Economic Review*, Vol.76, No.1, pp.109-203.

Randolph, S., Bogetic, Z. and Heffley, D. (1996): "Determinants of Public Expenditure on Infrastructure: Transportation and Communication", *World Bank Policy Research Working Paper (WPS1661)*.

Romer, P.M. (1989): "What Determines the Rate of Growth and Technological Change", *World Bank Working Paper*,

Romp, W.E. and de Haan, J. (2005): "Public Capital and Economic Growth: A Critical Survey", *EIB Papers*, Vol.10, No.1, pp.40-70.

Sahoo, P. (2001): "Wagner Hypothesis: Further Empirical Evidence from India", *Journal of Indian School of Political Economy*, Vol.13, No.1, pp.45-53.

Sanchez-Robles, B. (1998): "Infrastructure Investment and Economic Growth: Some Empirical Evidence", *Contemporary Economic Policy*, Vol.16, pp.98-108.

Serven, L. (1996): "Does Public Capital Crowd Out Private Capital? Evidence from India", *The World Bank Policy Research Working Paper WPS 1613*.

Singh, G. (1997), "Wagner's Law-A Time Series Evidence from Indian Economy", *The Indian Journal of Economics*, Vol. 77, No. 306, pp. 349.

Sturm, J.E. (1998a): "Public Capital Spending in The Netherlands: Development and Explanations", *Applied Economics Letters*, Vol.5, No.5

Sturm, J.E. (1998b): "Public Capital Expenditure in OECD Countries: The Causes and Impact of the Decline in Public Capital Spending", Cheltenham: Edward Elgar Publishing.

Sturm, J. E. (2001): "Determinants of Public Capital Spending in Less-Developed Countries", University of Groningen & CESifo Munich, (June).

Sturm, J.E. and de Haan, J. (2005): "Determinants of Long-Term Growth: New Results Applying Robust Estimation and Extreme Bounds Analysis", *Empirical Economics*, Vol.30, pp.597-617.

Tanzi, V. and Davoodi, H.R. (1997): "Corruption, Public Investment, and Growth", *IMF Working Paper No.97/139*

Terasawa, K. L. and Gates, W.R. (1998): "Relationships between Government Size and Economic Growth: Japan's Reforms and Evidence from OECD", *International Public Management Journal*, Vol.1, Issue 2, pp.195-223.

Usman, A., Mobolaji, H. I., Kilishi, A. A., Yaru, M. A., and Yakubu, T. A. (2011): "Public Expenditure and Economic Growth in Nigeria", *Asian Economic and Financial Review*, Vol.1, Issue 3 (September), pp.104-113.

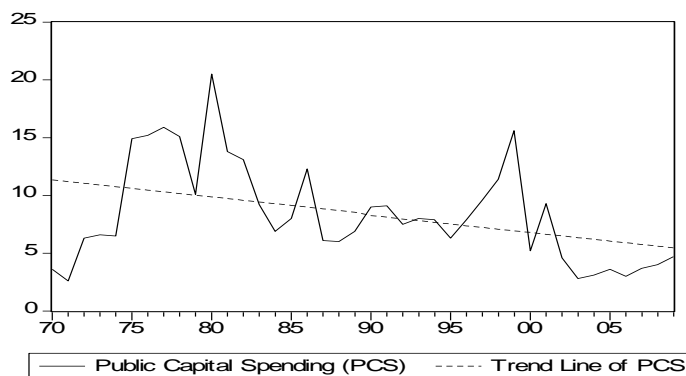
Wagner, A. (1883): *Three Extracts on Public Finance*, in R.A. Musgrave and A.T. Peacock eds. (1958), *Classics in the Theory of Public Finance*, London: Macmillan.

Wagner, R.E. and Weber, W.E. (1977): "Wagner's Law, Fiscal Institutions and the Growth of Government", *National Tax Journal*, Vol.30, pp.59-68.

Yuk, W. (2005): "Government Size and Economic Growth: Time Series Evidence for the United Kingdom, 1830-1993", *Econometric Working Paper No.EWP050*, Department of Economics, University of Victoria.

### Appendix I:

Figure 1: Public Capital Spending as a Share of GDP in Nigeria (1970 - 2009)



**Appendix II:**

**Table 1: Unit Root Test Results for all Series**

Series	Level		First Difference		Remark
	ADF	Philip-Perron	ADF	Philip-Perron	
Log of Public Capital Spending (lpcs)	-2.6233	-2.4512	-3.7317**	-6.7706***	I(1)
Log of Real Gross Domestic Product (lrgdp)	-2.2745	-1.9067	-5.0541***	-6.1518***	I(1)
Log of Private Investment (lpinv)	-1.9416	-1.5523	-3.6939**	-3.7772**	I(1)
Log of Foreign Private Investment inflow (lfpi)	-2.4120	-2.1793	-3.6342**	-5.0691***	I(1)
Log of Public Debt (ldebt)	-0.4311	-0.0892	-4.0431**	-5.0382***	I(1)
Log of Public Debt Service (ldebtser)	-1.5039	1.7239	-4.4354***	-6.0383***	I(1)
Credit to the Public Sector (lpcrd)	-1.9702	-1.4027	-3.6204**	-4.7633***	I(1)
Trade Openness (open)	-2.1980	-3.1596**	-4.7369***	-8.5735***	I(1)
Foreign Aid - GNI ratio (faid)	-4.9740***	-3.5375**			I(0)
Inflation Rate Uncertainty (muncinf)	-3.5597**	-6.2217***			I(0)
Exchange Rate Uncertainty (muncexr)	-4.4179***	-6.2992***			I(0)
Nominal GDP growth Uncertainty (muncngdp)	-4.9861***	-6.9163***			I(0)
Fiscal Balance Uncertainty (muncfbal)	-3.6104**	-4.3122***			I(0)
MacKinnon Critical Values for the Rejection of Hypothesis of a unit root	1% = -4.2165 5% = -3.5312 10% = -3.1968 N = 38	1% = -4.2092 5% = -3.5279 10% = -3.1949 N = 39	1% = -4.2242 5% = -3.5348 10% = -3.1988 N = 37	1% = -4.2165 5% = -3.5312 10% = -3.1968 N = 38	

Source: Estimates are from Econometric View Package

\*\*\* indicates 1 per cent level of significance \*\* indicates 5 per cent level of significance

**Appendix III:**

**Table 2: Cointegration Test Results (Long Run Determinants of Public Capital Spending)**

Variable	Model A	Model B	Model C	Model D
Constant	-10.5673 (-2.7114) ((0.0110))	-12.5664 (-3.5250) ((0.0014))	-12.2431 (-3.5691) ((0.0012))	-13.7044 (-4.1900) ((0.0002))
Lrgdp	0.4524 (3.8550) ((0.0006))	0.4760 (4.0591) ((0.0003))	0.4630 (3.9200) ((0.0005))	0.5727 (4.5541) ((0.0001))
Lpinv	0.3520 (3.0792) ((0.0044))	0.3327 (2.8626) ((0.0076))	0.3338 (2.9343) ((0.0064))	0.3154 (2.8770) ((0.0073))
Lfpi	0.6427 (4.1867) ((0.0002))	0.6341 (3.9189) ((0.0005))	0.6182 (3.8940) ((0.0005))	0.6294 (4.2098) ((0.0002))
Lcre	9.57E-08 (0.8703) ((0.3910))	9.19E-08 (0.8215) ((0.4178))	8.73E-08 (0.7844) ((0.4390))	2.79E-08 (0.2466) ((0.8069))
Laid	-0.1012 (-2.1066) ((0.0436))	-0.0956 (-1.9641) ((0.0588))	-0.0941 (-1.9448) ((0.0612))	-0.0560 (-1.0711) ((0.2927))
Lpen	9.8708 (2.5160) ((0.0175))	9.8524 (2.4395) ((0.0208))	9.7754 (2.4598) ((0.0199))	10.1228 (2.6509) ((0.0127))
Ldebtser	-0.1774 (-1.7551) ((0.0894))	-0.1792 (-1.7325) ((0.0935))	-0.1620 (-1.5285) ((0.1369))	-0.2500 (-2.3486) ((0.0256))
Sap	-0.2032 (-0.6383) ((0.5281))	-0.0993 (-0.3221) ((0.7496))	-0.1231 (-0.4004) ((0.6917))	0.0243 (0.0802) ((0.9366))
Munc	-0.0079 (-1.0568) ((0.2991))	-0.0006 (-0.1501) ((0.8817))	-4.3865 (-0.6626) ((0.5126))	2.17E-11 (1.6911) ((0.1012))
ADF Statistic	-4.1638***	-4.4224***	-4.3971***	-4.3971***
PP Statistic	-5.4585***	-5.4000***	-5.2680***	-5.8122***
1% Mackinnon Critical Value	ADF: -2.6243 PP: -2.6227			

**Source: Estimates are from E-View Econometric Package**

\*\*\* indicates 1 per cent level of significance while figures in single parentheses represent t-statistics while the ones in double parentheses represent probability values.

**Appendix IV:**

**Table 3: ECM Parsimonious Modeling Results Public Capital Spending in Nigeria**

Variable	Model 1	Model 2	Model 3	Model 4
Constant	5.2013 (2.1547) ((0.0414))	0.3831 (0.7884) ((0.4397))	0.8161 (2.5760) ((0.0169))	0.4447 (2.1393) ((0.0443))
$\Delta$ lpcs(-1)	-0.1627 (-0.9110) ((0.3714))	0.0473 (0.2215) ((0.8269))	-0.1172 (-0.6507) ((0.5217))	0.0892 (0.4510) ((0.6566))
$\Delta$ lrgdp		-0.0438 (-0.1811) ((0.8581))		0.0920 (0.4271) ((0.6737))
$\Delta$ lrgdp(-1)	0.0703 (0.4069) ((0.6877))		-0.1099 (-0.5352) ((0.5976))	
$\Delta$ lpinv	0.3257 (1.4199) ((0.1685))	0.2124 (0.5847) ((0.5653))	0.3420 (1.1156) ((0.2761))	0.1905 (0.6353) ((0.5321))
$\Delta$ lpinv(-1)		-0.1401 (-0.4409) ((0.6640))	-0.2836 (-0.9731) ((0.3406))	-0.1529 (-0.5605) ((0.5811))
$\Delta$ lfp		0.1214 (0.3884) ((0.7018))		0.1304 (0.4740) ((0.6404))
$\Delta$ lfp(-1)	-0.2127 (-0.8370) ((0.4108))	-0.1645 (-0.4870) ((0.6315))	-0.1539 (-0.5553) ((0.5840))	-0.3722 (-1.2418) ((0.2280))
$\Delta$ pcre	1.27E-07 (0.7680) ((0.4500))	1.75E-07 (0.6096) ((0.5490))	1.82E-07 (1.0487) ((0.3052))	2.44E-07 (1.0664) ((0.2984))
$\Delta$ pcre(-1)		6.31E-08 (0.1833) ((0.8564))		2.30E-07 (0.7420) ((0.4663))
$\Delta$ faid		-0.0259 (-0.3888) ((0.7015))		
$\Delta$ faid(-1)	0.0608 (1.2987) ((0.2064))	0.0777 (0.6719) ((0.5093))	0.0672 (1.3257) ((0.1980))	0.0894 (0.8878) ((0.3847))
$\Delta$ open		2.7536 (0.5909) ((0.5612))	3.1448 (0.7628) ((0.4533))	3.0165 (0.8079) ((0.4282))
$\Delta$ open(-1)	2.2276 (0.7445) ((0.4638))	2.6585 (0.5616) ((0.5806))	1.9496 (0.4918) ((0.6275))	
$\Delta$ ldebtser	-0.1247 (-1.0226) ((0.3167))	-0.0880 (-0.5259) ((0.6048))	-0.1113 (-0.8348) ((0.4124))	-0.2605 (-1.6834) ((0.1071))
$\Delta$ ldebtser(-1)	-0.3107 (-2.2037) ((0.0374))	-0.1926 (-1.0579) ((0.3027))	-0.1663 (-1.0904) ((0.2868))	-0.2278 (-1.4030) ((0.0352))
$\Delta$ muncinf	-0.0120 (-2.0147) ((0.0453))			
$\Delta$ muncexr(-1)		-0.0005 (-0.1325) ((0.8959))		
$\Delta$ muncigdp			-11.8310 (-1.6885) ((0.0448))	
$\Delta$ muncfbal(-1)				-4.11E-11 (-2.6629) ((0.0146))
Sap	-0.2732 (-1.9204) ((0.0668))	-0.1258 (-0.6944) ((0.4954))	-0.1589 (-1.1106) ((0.2782))	-0.0628 (-0.3994) ((0.6936))
ecm(-1)	-0.5170 (-2.4825) ((0.0204))	-0.6460 (-2.6088) ((0.0168))	-0.5817 (-2.8601) ((0.0089))	-0.8371 (-3.3950) ((0.0027))
R-squared	0.5724	0.5949	0.5370	0.5804
F-statistic	2.4717 ((0.0265))	2.1525 ((0.0770))	1.9055 ((0.0824))	1.8152 ((0.0999))
Durbin-Watson statistic	1.9585	1.9403	1.9674	1.9777

**Source:** Estimates are from E-View Econometric Package. Note that figures in single parentheses represent t-statistics while the ones in double parentheses represent probability values. Symbol  $\Delta$  preceding series represents first difference symbol.



# Psychic Imbalance In The Middle-Class West Indian: Edgar Mittleholzer's *Corentyne Thunder*

---

***Julia Udofia, Ph.D***

*Department Of English*

*University Of Uyo, Uyo, Nigeria*

***Dr Udofia@Yahoo.Com***

+2348033476317

## **Abstract**

The Caribbean can rightly be referred to as a plural society with different sets of cultural values existing side-by-side the other. This is attributable to the brutal mode of “founding” and settling of the place. However, with the abolition of slavery, education was introduced into the area. But education in the early period of colonial rule was designed not to equip the blacks with any practical skills, but to impart the rudiments of reading, writing and moral instruction. This underscored the subordinate and acquiescent status of the negroes in relation to their white masters and further intensified the deep-seated sense of inferiority and lack of confidence in the blacks. The latter responded in several ways, which included the total acceptance of foreign values and a nostalgic attachment to vestiges of the folk tradition, or, a blend of both cultures. There therefore, exists in the Caribbean a complex situation created by the existence and interlocking of different sets of cultural values. The result is a psychological dilemma between a yearning force and a loathing of the major different cultures. This psychic imbalance as depicted in Edgar Mittleholzer's *Corentyne Thunder* is, therefore, discussed in this paper.

## Introduction

Following the abolition of slavery in the Caribbean Islands, literacy was introduced into the area. But education in the early period of colonial rule was designed not to equip the blacks with any practical skills, but to impart the rudiments of reading, writing and moral instruction. This, which was initially organised by the missionaries underscored the subordinate and acquiescent status of the negroes vis-a-vis their white masters. Later on, the blacks were tutored in foreign history, literary and musical traditions and even the value system of the metropolis was imposed wholesale on them. Thus, the focus of colonial education encouraged further amnesia and shame about the African past and pushed the blacks towards accepting Europe as good. This intensified the deep-seated sense of inferiority and lack of confidence in the blacks.

The blacks responded in several ways which included the total acceptance of foreign values, which pre-supposed a negation of one's racial roots. There was also the rejection of Western values and a nostalgic attachment to vestiges of folk tradition, or a blend of both cultures. This situation gave rise to the creation of a plural society.

Thus, the post-emancipation West Indies was still strongly under foreign domination through colonialism. Consequently, there exists in the Caribbean a complex situation created by the existence and interlocking of different sets of cultural values: the foreign-derived metropolitan culture which is mostly seen among the upper and middle-classes and the black Creole culture which contains many African-derived elements and is practised mainly by the lower-classes. Also present is the rural Indian peasant culture.

These various social classes act and think differently and one class is elevated and aspired towards, to the detriment of the other. While the upper and middle-classes speak Standard English, contract legal marriages and practise the culture and religion of their former European masters (they attend either the Catholic or Anglican Church), the lower classes, on the other hand, generally speak the Creole dialect, engage in fetish practices and do not contract legal marriages. Thus, the upper and middle-classes usually have a formal education, are financially secure and also have unit families with the father as the apparent head. They, unlike the lower classes refuse to be associated with anything reminiscent of the African past. Consequently, their world is cold, artificial and pretentious with very little evidence of communality within the families.

And so, the Caribbean has been described as a plural society made up of people displaying different modes of behaviour, and who are held together by economic reasons rather than by a sense of belonging to a common culture. It became a deterministic society where social status was predicated upon skin pigmentation and people were divided into exclusive water-tight colour compartments. This divisive unity was the result of different responses and modes of adjustment to the void created by dispossession. The slave ancestors had been dispossessed of their motherlands and forced to live in an alien and hostile milieu in which they were made to feel racially and culturally inferior. The result is a psychological dilemma between a yearning force and a loathing of the major different cultures - the peasant and the middle-class cultures. This psychic imbalance in the middle-class West Indian as explored by Edgar Mittleholzer in his *Corentyne Thunder* is the subject of study in this paper.

### **Psychic Imbalance in the West-Indian Intellectual**

Published in 1941, *Corentyne Thunder* focuses on the attempts of the Caribbean middle-class to respond creatively to the various influences in the Caribbean social

system. In the novel, Edgar Mittleholzer considers the problems arising from alienation, uprootment and of being heir to several cultures, which is a common psychological dilemma of New World blacks. In the work, Geoffry Weldon, the central character is shown as oscillating between two diametrically opposed socio-cultural systems as he tries to figure out how to reconcile the diverse cultures offered by the diverse pasts of the Caribbean. At the root of Geoffry's dilemma is the problem of cultural identification with a particular set of norms which could provide him with the framework for everyday life.

The two opposing cultural systems presented in the novel are the metropolitan culture and the rural Indian culture. The West Indian middle-class is heir to both cultural systems and the dilemma arises when he tries to divorce himself at any time from either culture. Mittleholzer highlights the dilemma of the West Indian intellectual who is alienated from his peasant roots, yearns to be fully accepted by the Western world, and yet feels a sense of void and incompleteness because of his rejection of the folk experience. The author thus, explores extensively the issue of psychic imbalance resulting from racial mixtures in the West Indies and shows Geoffry Weldon trying unsuccessfully to come to terms with his dual racial and cultural heritage. And so, *Corentyne Thunder* deals simultaneously with the unadorned, resilient nature of Guyanese peasant life and the divided consciousness of the West Indian intellectual.

The author deals with the schisms that exist between these two groups of characters i.e., the peasants and the middle-class West Indians. The dilemma arises when the latter tries to divorce himself at any time from either culture.

However, side-by-side the exploration of the dilemma of the middle-class West Indian who, through education and socialization has become cut off from the peasant world and whose desires, ambition and attitude to life are informed by Eurocentric consciousness, the author also satirises the West Indian "arrivista" middle-class for their foolish, uninformed and indiscriminate imbibing of Western ways as seen for instance, in Baijan, Ramgollal's son and his fiancée, Elizabeth Ramjit. Geoffry Weldon, the prototype of the West Indian intellectual tries unsuccessfully to reach a median between assenting to his father's Eurocentric expectations and acknowledging his visceral attachment to Indian folk culture. Geoffry cannot reconcile his liking for classical music, European philosophy and art forms with his uncontrollable sexual attraction towards Katree. Katree represents all that Geoffry despises: she is unlettered, poor and lives in a poorly ventilated dirty hut. She is content to enjoy passions of the moment and does not analyse or attempt to justify her actions as Geoffry does. The relationship between these two characters represents a temporary encounter between the European-oriented, calculating and intellectual world and the indigenous, physical and spontaneous peasant existence. It is an imaginary confrontation between the most unsophisticated member of the Indian society and the "hypercivilized" member of the middle-class.

However, Mittleholzer delineates the world of the East Indian peasants in all its stark reality. He shows this world as gradually adjusting to modern ways. The different generations of peasants have different attitudes towards life, yet share the strength of the folk experience which makes them pragmatic in the face of vicissitudes and change. The differences between the peasants' expectation of life shows that this experience is neither static nor pre-apportioned. The various generations respond differently to different aspects of their life, for instance, due to Ramgollal's bitter history of deprivation through indentureship and anxiety due to financial uncertainty, he translates each new disaster

into fiscal terms; for instance, the issue of Katree's pregnancy. There is also his hidden store of coins which provides him with a sense of security against future deprivation, even though he agonizes over any unexpected expenditure.

The emphasis here is not on the ludicrous dimensions of Ramgollal's miserliness but on the security provided by his possession of this money. Ramgollal regards money as an abstract, although comforting quality, while his daughters have a more pragmatic approach to money; for example, Sosee and Beena do not hesitate to plunder their father's store of money for their personal purposes.

Ramgollal belongs to the generation of East Indian peasants who have been socialized into self-deprivation. His inordinate attachment to money is an index of the depth of his insecurity. His offspring are not weighed down by such considerations and are more open, spontaneous and therefore, more human in their attitude to life, for instance, Katree engages in an affair with Geoffry, despite the knowledge that he is her kin and that the affair must necessarily be transient. Beena also plunders his father's store of money to save the life of the man she loves despite the fact that he is married. The need and desires of Ramgollal's children do not, thus, always coincide with his end. Their love for him does not prevent them from defying him in order to achieve their purposes.

Like Selvon, Mittleholzer also however, presents the peasants' world without sentiments. He places the beauty and ugliness of this world side-by-side its changeable policies, so that simultaneously, we see the physical beauty of the girls, their devotion to hard work, their father and to picking the lice in their hair. We also see the filthy, untidy interior of their home. Nature itself is not romanticized and while it occasionally reflects the inner turmoil of some of the characters, it is usually implacable and uncaring about the problems of the people.

Mittleholzer has a vision of a West Indies in which the middle-class can learn enduring lessons from the peasants' experience. While depicting the peasants' world as less than sanitary and harmonious, he shows that the middle-class West Indian could cope better with existential problems by adopting the pragmatic attitude of the peasants. Through the depiction of Big Man Weldon and Geoffry Weldon, Mittleholzer shows how inhumane and distant the Eurocentric West Indian can become; for example, Big Man, though not fully European himself deplores anything native and berates his son, James for speaking like a "coolie". Geoffry is shown to be selfish and calculating in the way he handles Clara's abortion and in the casual way he starts an affair with Katree without regard to its implications and outcomes.

The latter relationship clarifies the fundamental differences between these two groups of people - the peasants and the middle-class. Geoffry regards the affair as a pleasurable way of spending his vacation and feels no remorse at leaving Katree pregnant with his child. He, however, agonizes over his conflicting inclinations and is unable to reconcile both his physical desires and intellectual leanings. Katree, on the other hand, fully acknowledges her physical desires and welcomes the idea of having a baby with or without Geoffry's support. She is not overwhelmed by Geoffry's erudition and whenever he embarks on an intellectual monologue, she ignores him.

However, through Ramgollal's offspring, Mittleholzer also delineates the different possibilities open to the West Indian. Ramgollal is a miserly peasant whose vision and expectation of life are limited to monetary considerations. However, other possibilities are open to his progeny, such as the life of the alienated middle-class

intellectual, like Geoffry; the experience of the confused superficial “arrivistae” such as Baijan and Sosee; and the impassive but resourceful lives of contemporary peasants as exemplified by Katree and Beena.

In the end, Mittleholzer’s depiction of the dilemma created by the middle-class West Indian’s divided consciousness loses its potency through the depiction of Geoffry. His uncertainties might be real but he is too superficial and machiavelian to sustain the reader’s empathy. Ultimately, Mittleholzer implies that all the valuable lessons can be learnt from the world and responses of the East Indian peasants which he explores without bias.

### **Conclusion**

This paper has thus, examined the issue of psychic imbalance in the West Indian middle-class as explored in Edgar Mittleholzer’s *Corentyne Thunder*. The psychic imbalance arises from alienation, uprootment and of being heir to several cultures. The slave ancestors had been dispossessed of their motherlands and forced to live in an alien and hostile milieu in which they were made to feel racially and culturally inferior. The result is a psychological dilemma between a yearning force and a loathing of the major different cultures. At the root of this dilemma is the problem of cultural identification with a particular set of norms which could provide the framework for everyday life. And so, the novel while dealing with the unadorned resilient nature of Guyanese peasant life also simultaneously deals with the divided consciousness of the West Indian intellectual. It explores the schisms that exist between these two groups of characters.

However, while depicting the peasant world as less than sanitary, Mittleholzer shows that the middle-class West Indian could cope better with existential problems by adopting the pragmatic nature of the peasants. He thus, implies that all the valuable lessons can be learned from the world and responses of the East Indian peasants which he explores without bias.

Generally, the emphasis on folk characters in the literature of a changing milieu helps in the creation of a myth about the authentic, organic and harmonious traditional life as a foil against the onslaught of disruptive foreign influences. Mittleholzer does not however, simplify issues and delineates the world of the East Indians in their stark reality. He locates his fictional world firmly within the tradition of this “little” people (the rural dwellers). He uses their speech patterns, refers to their customs, world-views and responses to a changing society to show the tangible existence of a way of life which must be properly evaluated in order to enable West Indians to adjust easily to change. He consistently shows that without a fundamental attachment to the beneficial aspects of folkways, the West Indian is liable to become adrift as seems to be the case with the West Indian intellectual in this novel. He sees the West Indies as being on the brink of confrontation with Western civilization and he shows that although aspects of traditional life are reactionary and should be discarded, the positive attributes of this life are necessary to successfully confront a foreign culture.

He also advocates creolization as long as it is accepted with caution and does not involve a fool-hardy abdication of folkways. This vision is conveyed through the characters who, though represent various responses to change, share the strengths of the folk experience.

### Works Cited

Ashcroft, Bill and Co. *The Empire Writes Back: Theory and Practice in Post-Colonial Literatures*. London: Routledge, 1990.

Baugh, Edward, ed. *Critics on Caribbean Literature*. London: George Allen and Unwin, 1978.

King, Bruce, ed. *Literatures of the World in English*. London : Routledge and Kegan Paul, 1974.

Lacovia, R. M. "Caribbean Literature in English: 1949-1970". In *Modern Black Literature*. S. O. Mezu ed. Buffalo: Black Academy Press Inc., 1971

Mittlelholzer, Edgar. *Corentyne Thunder*. London: Heineman, 1941.

*A Morning at the Office*. London: Heineman, 1950.

Naipaul, V. S. *The Middle Passage*. London: Penguin Books Ltd., 1969.

Selvon, Samuel. *A Brighter Sun*. London: Longman Group Ltd., 1979.

*Turn Again Tiger*. London: Heineman, 1979.

*Ways of Sunlight*. London. Longman Group Ltd., 1979.

Ramchand, Kenneth. *The West Indian Novel and its Background*. London. Faber and Faber, 1970.

"The West Indies". In *Literatures of the World in English*. Bruce King, ed. London: Routledge and Kegan Paul, 1974.

Walsh, William, ed. *Commonwealth Literature*. London: Oxford Clarendon Press, 1973.

Williams, Eric Eustace. *British Historians and the West Indies*. London: Andre Deutsch, 1966.

*From Columbus to Castro: The History of the Caribbean 1492-1669*. London: Andre Deutsch, 1970.

# Grounded Theory Method with a Historical Dataset

---

*Jari Metsämuuronen*

*University of Helsinki, Finland*

*jari.metsamuuronen@gmail.com*

**Abstract:**

While the Grounded Theory Method (GTM) has successfully been applied in several types of qualitative inquiries within human sciences, it has not been often implemented in historical datasets. However, this article shown with a case study that GTM is also suitable when studying processes with historical artifacts and writings. This article concentrates on special requirements when applying GTM to historical datasets. A historical dataset brings two additional elements to the GTM process: 1) need to understand the constructs of meanings of historical persons and writers and 2) need to understand the specific characteristics of historical sources. Pure Glaserian inductive reasoning is hardly possible when applying GTM with historical data, because the researcher may need a depth of pre-knowledge on the thinking of historical persons and historical social processes. This automatically leads to a need for Straussian abductive reasoning, instead of inductive reasoning.

**Keywords:** Qualitative research, Grounded Theory, Methodology, Abductive reasoning, Inductive reasoning, History, Historical dataset

## 1. Introduction

The Grounded Theory Method (GTM) has successfully been used in several types of qualitative inquiries, such as action research (Dick 2007), ethnography (Timmermans & Tavory 2007), Critical Theory (Gibson 2007), Feminism (Olesen 2007), information systems (Urquhart 2007), as well as in countless applications in education and the social sciences (see Timmermans & Tavory 2007, Hood 2007, Figure 1). However, to date, GTM has not implemented in historical datasets (see, however Seaman [2008] who discusses its possibilities in Socio-Cultural settings). This article concentrates on the special requirement when applying GTM to the historical datasets. In Section 2, introduction of GTM as a research method is presented, and abduction as a basic type of reasoning is detailed. In Section 3, the practical issues of implementing GTM to the historical datasets are provided. In Section 4, an example of the methodological decisions in a GTM study with historical dataset is given as an example.

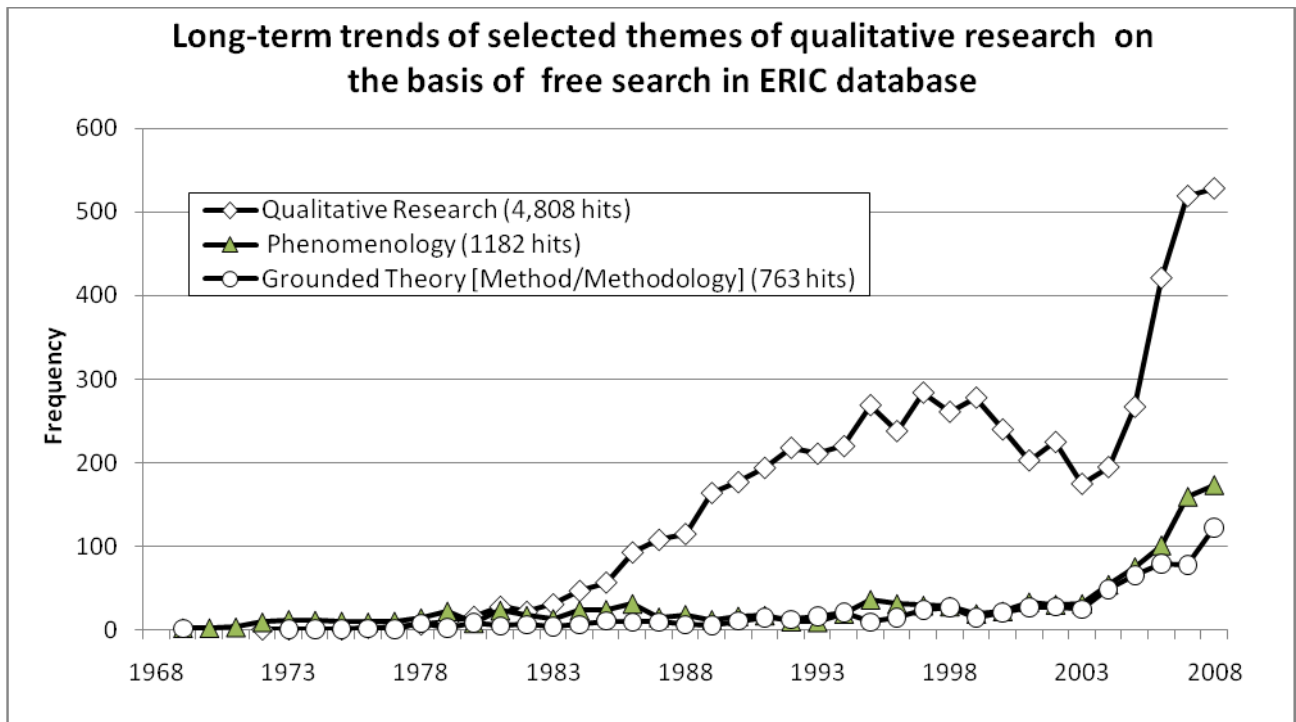
## GTM in Theory and Practice

### Grounded Theory Method or Methodology?

The usual way of thinking in scientific quantitative narrative is that the *verification* of the theory is the main purpose of the scientific inquiry. However, how does theory emerge? How can one create a theory? After its launch in the late 1960s (Glaser & Strauss 1967), GTM has developed as one of the most used single qualitative methods to create a theory on the basis of data in social sciences (Timmerman & Tavory 2007, 494; see also Titscher *et al.* 2000, 74; Hood 2007, 151–152). In educational research also, GTM is one of the most popular single qualitative methods; the number of publications in Educational Resource Information Center (ERIC) database with the keyword “Grounded Theory” or “GTM” has increased in 6 years (2003–2008) from 25 to 123 publications per year, indicating five times more publications (Figure 1). However, an observation by Titscher *et al.* (2000, 74) is also relevant in the educational settings: the actual volumes of publications (763 hits in ERIC database) are quite low compared with the number of hits, e.g., of more diffuse keyword “Content Analysis” (7256 hits) or nothing to say of a general strategy for qualitative inquiry, “Case Studies” (32 216 hits).

In educational literature, GTM shares the same popularity as Phenomenology (Fig. 1, of phenomenology see, e.g., Giorgi 1992, 1996a, 1996b, 1997). Both the methods are systematic tools to conduct “content analysis” and to derive a theory of a social reality. However, employing more than a single research method or strategy GTM is said to be a general way to think and abstract qualitative data – a methodology (Strauss & Corbin 1998, 4; Strauss & Corbin 2000, 275, Legewie & Schervier-Legewie 2004). It was created as a methodology to discover theories – either as a substantive grounded theory (SGT) or formal grounded theory (FGT), as addressed by Glaser (2007) – dormant in the data. However, the term “method” instead of “methodology” is still usually used when referring to GTM (see Bryant & Charmaz 2007b, 1; Charmaz 2006, 9; Bryant 2003, 2; Glaser 2001, 1).





**Figure 1. Long-term trends of the keywords “Qualitative Research,” ”Grounded Theory,” and “Phenomenology” in the ERIC database**

After the well-known and well-reported break-up<sup>1</sup>, in 1992, Glaser and Strauss developed the GTM method to dramatically different directions<sup>2</sup>: Glaser developed GTM in a more strict way (see, e.g., Dey 1999, 23; Bryant 2003, 12; Greckhamer & Koro-Ljungberg 2005) – he himself called his tradition as “traditional” or “classic” GTM (see Bryat & Charmaz 2007b, 5) – and only allowed pure and strict inductive reasoning on

<sup>1</sup> In 1987, Strauss published *Qualitative Analysis for Social Scientists*, in which he developed GTM to a slightly (or fundamentally, depending on the standpoint) different direction than Glaser in his own book (Glaser 1978). In *Basics of Qualitative Research* (Strauss & Corbin 1990), Strauss developed the method further with his colleague, Juliet Corbin – too much to be called anymore as Grounded Theory, claimed Glaser. Glaser wrote the famous open letter to Strauss (Glaser 1992), in which he claimed that Strauss has destroyed Glaser’s scientific creativity and urged Strauss to take his book out of the markets. Glaser wrote the book (1992), in which he went through the Strauss’ book page-by-page and showed how “wrong” Strauss was.

<sup>2</sup> It is good to note that there are also some other traditions than Glaserian and Straussian. Charmaz claimed that both Glaserian and Straussian tradition carry a burden of objectivism, i.e., positivistic paradigm (see, e.g., Charmaz 2000, 2001; Charmaz & Mitchell 2001). She suggested a method that allows different results from the same data on the basis of constructivistic viewpoint. Thus, it is widely accepted that there are three traditions of GTM (Bryant & Charmaz 2007b, 10). However, Denzin (2007) suggested seven different versions: positivist, post-positivist, constructivist, objectivist, postmodern, situational, and computer-assisted. When it comes to practical solutions, there are no vast discrepancies – if at all – between the traditions.

the basis of the results – “All is data” (e.g., Glaser 2001, 145). On the other hand, Strauss (Strauss & Corbin 2000) allowed inductive–deductive reasoning as well as abductive reasoning. This difference in reasoning is crucial when using historical datasets and sources, and has been discussed in detail.

### **Abductive reasoning as logics behind Straussian GTM**

The basic dictum of Glaser’s “All is data” is used to emphasize that in the original GTM and in later Glaserian tradition, the “theory” should always be derived solely on the basis of source material – not on the basis of previous (assumed) theories<sup>3</sup>. However, it seems that most writers, e.g., *The Sage Handbook of Grounded Theory* (Bryant & Charmitz 2007a) share merely another, Straussian tradition, in reasoning. In Straussian tradition (as well as in the constructivist tradition), the results are always bound to context, and subjectivity, experiences, and knowledge base of the researcher have an impact on the inferences and conclusions (Strauss & Corbin 2000, 276). Reasoning cannot be carried out in a vacuum with no values, preliminary theoretical tools, and knowledge of relevant research literature – “*we should not confuse the open mind with an empty head*” as pointed out by Dey (Dey 2007, 176; also Dey 1993, 229). It is not possible to develop “theoretical sensitivity” (see Glaser 1978) in pure Glaserian sense without some familiarity of research literature – lack of knowledge may lead to naïve GTM as noted by, e.g., Gibson (2007, 439, 445, 448). In naïve GTM, a novice researcher may introduce a “theory” as a new one without knowledge that the same idea has already been published by another researcher(s) (see also Lambert 2007, 254). Thus, usually, in practice, the abductive reasoning is adopted as the main basis for theory formulation.

The term abduction can be traced back to pragmatist, Charles S. Peirce<sup>4</sup>, who used it to denote the “only truly knowledge-extending means of inferencing ... that would be categorically distinct from the normal types of logical conclusions, namely deduction and induction” as stated by Reichertz (2007, 216). Classically, deduction is used when generalizing accepted propositions or laws to derive a specific conclusion or a case, and induction is used when deriving more general conclusions on the basis of specific cases. Abduction is used when, on the basis of an interpretation of collected data, a researcher assembles or discovers such combinations of features for which there are no appropriate explanation or rule in the store of knowledge that already exists (Reichertz 2007, 219). Peirce’s “three-stage discovery procedure” starts with abduction, and is followed by deduction and induction. In the abduction phase of a scientific discovery (or a theory), a preliminary hypothesis is derived. In the second phase, derivations of the predictions are drawn on the basis of the found hypothesis, i.e., the preliminary categories for the theory are formed. In the induction phase, the facts are searched to verify the assumptions, i.e., the concept indicators of the categories are collected on the basis of the categories, and the facts are used to challenge the categorization. If the facts cannot be found, then the process is started again (Reichertz 2007, 222).

---

<sup>3</sup> Of course, the Glaserian and Straussian traditions are not this black and white as presented here. There certainly are more shadows. However, the distinction of classifying Glaserian tradition more of inductive and Straussian tradition more of deductive and abductive serves the purpose of illustrating the main lines of the traditions.

<sup>4</sup> Actually – as pointed out by Reichertz (2007, 216) – Julius Pacius used the term as early as 1597 when he translated Aristotelian concept of *apagoge*. However, Peirce adopted the term and developed the concept as we know it today.

In practice, the abductive reasoning indicates that we use all the information available when forming the first categorization on the basis of the qualitative data. In this sense, the researcher is “open minded” but not “empty headed”, as pointed out earlier by Dey. As in all research, the data is taken seriously and the findings have to fit the data. On the top of this, abduction in reasoning signifies that the interpretation of the data is not finalized at an early phase, but that new codes, categories, and theories can be developed and redeveloped when necessary (Reichertz 2007, 224).

### **GTM in Practice**

All GTM traditions are quite similar when it comes to their practical solutions. All the different versions share common elements, and several researchers have contributed in offering ideas regarding what the essential properties of GTM are (see, e.g., Hood 2007, Urquhart 2007, Wiener 2007, Stern 2007, Bryant & Charmaz 2007b, Metsämuuronen 2008). Urquhart (2007, 350–354) pointed out to five features, Wiener (2007, 301–306) indicated seven features, and Glaser and Strauss themselves (1967) pointed out seven key components. Hood found the minimalistic set of characteristics, and stated three essential features that distinguish GTM from the other Generic Inductive Qualitative Models (GIQM), and referred to them as “a troublesome trinity”: 1) theoretical sampling<sup>5</sup>, 2) constant comparison of data with theoretical categories, and 3) focus on the development of theory via theoretical saturation of categories rather than substantive verifiable findings (Hood 2007, 152, 163–164). It is good to note that the three minimalistic features are the *differentiating* GTM from the other strategies for qualitative inquiry – they are not the only element in the GTM process.

Metsämuuronen (2008, 98), based on the findings of Martikainen and Haverinen (2004, 136–137), also suggested seven common features for GT methods. However, the viewpoint is slightly different from Urquhart’s, Wiener’s, and Glaser and Strauss’ lists; the list also takes into account the object and aim as well as the output of the study. According to Metsämuuronen (2008) and Martikainen and Haveri (2004), GTM studies share the following characteristics:

- 1) Objects of the research are personal experiences and constructs of meanings or a social process.
- 2) Aim of the research is to create a theory.
- 3) Data are collected with the principle of theoretical sampling.
- 4) Data are analyzed by using the method of continuous comparison.
- 5) As a result of the analysis, a core category is defined.
- 6) After analysis, a substantial theory is discovered.
- 7) A formal theory is discovered [when developed on the basis of the data].

Certainly, the minimalistic set of features, “the troublesome trinity”, is embedded in the list (points 3, 4, and 6). According to Glaser (e.g., 2007, 98–99), there is no push for the formal theory (FGT). In an optimal case, an FGT is developed on the basis of the data as a generalization of the substantial theory’s (SGT) core category. Thus, the seventh point is an option. These seven characteristics are operationalized later in Section 4.2.

---

<sup>5</sup> These characteristic features, concepts, and practices are not handled in this article. They can be found easily in the basic textbooks of the method (see, e.g., Glaser & Strauss 1967, Glaser 1978, Strauss & Corbin 2000, Dey 2000, Charmaz 2006).

### 3. GTM and a historical dataset

Usually, the objects of the GTM studies are personal experiences and constructs of meanings, or a social process, as suggested by Metsämuuronen (2008) and Martikainen and Haveri (2004). When studying the experiences, meanings, and social processes of a *contemporary individuals* and well-known or *familiar behavior*, the researchers can intuitively feel the similarity with the informants and thus, may understand the data reasonably easily. From this point of view, it is possible to apply the Glaserian inductive reasoning; it may be possible to develop a theory on the basis of the data without pre-knowledge about the phenomenon or previous theoretical results, only by using intuition and even rather limited personal experiences on the topic. On the other hand, the social processes are usually *complex* and thus, an experienced researcher may have an advantage over a novice researcher, by having a broader and deeper knowledge on life itself, as well as the knowledge on earlier results, theoretical frameworks, research methodology, categorizations, etc. In the latter case, it is practically impossible *not* to use abductive reasoning; more experienced researcher cannot – and it not wise to – totally block his or her previous experiences from the analysis process.

Thus, it is evident that first, when the object of the study is a social process, personal experiences, or constructs of meanings, and the aim of the study is to derive a theory on these areas, then GTM is a suitable procedure to follow with a historical dataset as well. Second, the social processes are usually complex – even in contemporary settings. Furthermore, historical settings are even more complex than contemporary settings, because of the distance between the actual process and the standpoint of the researcher. Thus, an *experienced researcher advances even more* than a novice one with the historical settings, because of wider and deeper knowledge-base of the phenomenon, theoretical issues, and thinking of the historical persons and historical social processes. Historical dataset brings two additional elements to the GTM process, which are discussed in the subsequent sections: 1) understanding of the constructs of meanings of the historical persons and writers, and 2) the specific characteristics of the historical sources.

#### Understanding historical persons and processes

The historical dataset – e.g., historical letters, books, writings, or other artifacts – brings some special features to the GTM, and consequently, the Glaserian tradition with pure and strict inductive reasoning cannot be used as the basis for discovering a theory. In other words, it is not obvious whether the researcher understands the experiences and constructs of meanings of a *historical* individual and historical process without a proper study of thinking and practices of the time. Though it is possible to comprehend a modern thinking with respect to an ancient or a Medieval text, it would usually be taken as poor basis for creating a plausible theory of the social process of the historical time. For example, it is hardly possible to understand the thinking of a Medieval woman on the basis of a modern feminist viewpoint. It is, however, possible to interpret a historical text from the modern viewpoint, e.g., a Medieval text can be read from the feminist standpoint, but the issue of deep understanding of the texts and other artifacts is extremely crucial for developing a theory in a historical dataset. Thus, to adequately conduct any qualitative inquiry with a historical dataset, there is a need for quite a deep pre-knowledge about the historical and cultural issues, including the thinking and mindset of the historical persons.

When attempting to understand the mindset of an ancient person, the researcher needs to comprehend the subject. Methodologically, it is important for the researcher to understand the ancient text in the same way as Owen Chadwick interpreted the famous dictum of Augustine: *Nemo nisi per amicitiam cognoscitur*, “you cannot understand anyone except out of friendship”. Chadwick’s advice for the historical study is that there is “*the need to be inside minds, and to forget the future which they could not know, and to come towards them with the openness of mind, the readiness to listen, which a man gives to his friends*” (cited by Burns 1998, ix). It is a basic flaw to try to understand, e.g., the thinking of an ancient religious Jewish writer or speaker, from a secularized and scientific Western viewpoint. Even theologians with a proper knowledge of the time may have fallen into this pitfall: Meier (1999) commented the reputed and critical Jesus Seminar’s works of the historical Jesus as follows: regardless of the possible sincere attempts “*it has not avoided the temptation of projecting a modern American agenda onto a first-century Palestinian Jew*”.

### **Characteristics of the historical source**

Another specialty arising from the historical settings, usually not deeply discussed when working with contemporary datasets, are the specific issues concerning the data, such as the *origin, purpose, reliability, and accuracy* of the source. The historical evidences are usually “winners history” and the texts were produced for certain purposes – not necessarily for research purposes – and thus, the text may include even purposefully biased information. For example, historian Josephus Flavius (Flavius 1989a, 1989b, 1989c), in the first century, may have seen Jews in a positive light, which is understandable – he himself was a Jew and he was writing the history of Jews for the Romans. Of course, the same dilemma also exists with the contemporary texts and datasets, such as with diaries and other self-reports as well as the short visits to the “field” in ethnographic settings; how do we know that the informants are not lying (or more positively: “coloring” the story) when writing something in the diary or telling us their experiences? Evidently, the researchers may not know this; however, the source is still trusted to give reliable information for the study.

Another view to the accuracy of the source is that sometimes we are *not* interested in the accuracy of the text *per se*. Instead, we are just willing to discover a theory on the basis of “all is data” principle. For example, we may be interested in developing a theory of “Jesus’ teaching methods” in the beginning of the Common Era, as discussed later in Section 4. Most of the reliable sources are the canonical Gospels of Matthew, Mark, Luke, and John. However, the modern historical-critical paradigm in theology is not uniquely sure whether all the words read in the Gospels are *Ipissima verba Jesu*, i.e., whether the sayings are genuinely from Jesus, an artwork of the later redactors, or corrections to the texts. However, regardless of the possible discrepancies among the Gospels (or discussions of whether the teachings are of Jesus at all), one can use the texts as a primary source to discover a theory of “Jesus’ teaching methods on the basis of canonical Gospels” or shorter “Jesus’ teaching methods”. However, whether the words are of historical Jesus or not is irrelevant; those words and teaching of “Jesus” have very deeply affected western culture and religious actions, as well as the teaching styles, particularly the content of teachings in churches.

The bottom line is that the challenge of understanding the historical mind means, in practice, that it is not possible to think any serious GTM study with a historical dataset

which would be based on Glaserian strict inductive reasoning; historical studies with GTM procedure must always use abductive reasoning when attempting to draw plausible conclusions from the dataset. In Section 4, some practical issues of a historical dataset and a specific application of GTM are discussed and detailed as an example. However, only the methodological solutions are discussed – no results are handled.

#### **4. A Practical Example of Methodological Solutions of GTM with a Historical Dataset**

In this section, an example based on educational–historical–psychological–methodological project, “Jesus as Teacher”, is presented to clarify the kinds of decisions that need to be made in GTM study of a complex phenomenon with historical dataset. The section discusses the methodological aspects of the specific sub-study of Jesus’ effectiveness as a speaker. First in Sections 4.1 and 4.2, the specific research question and the GTM application used are described. In Section 4.3, the specific features relevant for GTM with the historical dataset are discussed, such as: (1) the pre-knowledge of contemporary theories of cognitive and constructive psychology, and Aristotelian rhetoric, (2) the cultural and historical specialties of the era, and (3) the unique characteristics of the source text. Additionally, a few remarks of the trustworthiness of the GTM study in general and of the specific study of Jesus’ talks are discussed in Section 4.4.

##### **4.1 Research question**

The research question was set as follows: “What kind of mnemonic tools Jesus used in his talks?” The term “mnemonic tool” (Greek *mneemoneuein*, “to remember”) refers to all conscious and unconscious techniques and methods with which the **speaker** or **teacher** enhances the retention of the message. It should not be confused with “mnemonics” which are used by the **listener** or **student** as methods for remembering information that is otherwise difficult to recall (see, e.g., Bafile 2005). Of course, the selection of the wording implicates, first, that the researcher is reading the texts from a certain perspective – the purpose is to find answer to a specific question, not to discover what the overall content of the text was. Second, the wording of the research question implicates that the phenomenon in focus is somewhat complex and requires certain amount of advanced knowledge of education, psychology, rhetoric, history, and theology.

The research question was tackled by exhaustively studying the six main talks documented in the Gospel according to Matthew (Mt): Sermon on Mount (Mt 5:3–7:27), Commissioning (Mt 10:5–42), Sermon on Boat (Mt 13:1–51), General speech (Mt 18:3–36), Speech to the Pharisees and Scribes (Mt 21:28–23:39), and Olivet discourse (Mt 24:04–25:46).

##### **4.2 GTM application**

The main methodological solution to study the mnemonic tools in Jesus’ talks was GTM. The abductive reasoning (from Straussian tradition) was used for pragmatic purposes: it is neither possible nor wise to try understanding the thinking of ancient people without a basic knowledge of historical matters (see Chapter 3.3). On the other hand, to understand the universal computational laws in brains, the basic knowledge of both cognitive psychology and constructive psychology is also needed. In addition, it is important to deepen the pre-knowledge in rhetoric. However, the stricter Glaserian tradition was used when reading the text; the text was read without trying to push the data

into prefix categories of the known theories. Subsequently, the found “theory” was compared with known psychological and rhetorical theories. Thus, the abductive reasoning was used mainly in application.

The seven basic principles for GTM introduced in Section 2 were as follows:

- 1) Objects of the research are personal experiences and constructs of meanings, or a social process.
- 2) Aim of the research is to create a theory.
- 3) Data is collected with the principle of theoretical sampling.
- 4) Data is analyzed by using method of continuous comparison.
- 5) As a result of the analysis a core category is defined.
- 6) After analysis substantial theories are created.
- 7) A formal theory has been created [when rising on the basis of the data].

The application of GTM fulfills the requirements as follows:

- 1) The object of the study was to explore what kind of mnemonic tools Jesus used to make the listeners remember the oral message that he taught (say, social process was in focus).
- 2) Aim of the study was to create a theory of the elements of a mnemonically rich speech – either how Jesus did it (a substantial theory) or how in general a good speech may be constructed (a formal theory).
- 3) Units of mnemonic tools, i.e., the cognitive and logical, semantic and narrative, and rhetoric and emotional concept indicators were initially collected by analyzing the Sermon on Mount (Mt 5:3–7:27). In the initial coding phase, a total of 227 different units (counted by verses)<sup>6</sup> were classified into several categories. This initial coding structure was used when analyzing the next speech (Commissioning, Mt 10:5–42). This initial use of coding scheme is called theoretical sampling.
- 4) During the coding process, the initial categories were challenged by combining similar units from smaller categories to larger categories, and splitting large categories when needed. This is called continuous comparison. After each speech – Sermon on Boat (Mt 13:1-51), General speech (Mt 18:3–36), Speech to the Pharisees and Scribes (Mt 21:28–23:39), and Olivet Discourse (Mt 24:04–25:46) – the classification structure was checked and challenged. After the last speech, the coding process started from the first speech and the coding harmonized.

---

<sup>6</sup> The number of verses was selected as a basis for frequencies in the categories. Otherwise, the parables would have been excluded, and only a few lines would have been selected from a long sequence.

- 5) On the basis of the categorization, a more general category, “mnemonic tools in Jesus’ talks” or “mnemonic tools of an effective speech”, was defined (Core category).
- 6) Substantial theory of Jesus as an effective speaker was created.
- 7) A formal theory of general characteristic of a mnemonically rich speech was created.

The study fulfills the seven characteristics of a GTM study as specified by Metsämuuronen (2008) and Martikainen and Haveri (2004). It also obviously fulfills the “troublesome trinity” (Hood 2007), because they are embedded into these seven. Therefore, the study is certainly a GTM study, however, with a twist of specialties characteristic to GTM with a historical dataset. These specific issues are discussed in Section 4.3.

### **4.3 Special characteristics of GTM with a Historical dataset**

#### **Remarks on the pre-knowledge of psychological and rhetorical issues**

In the qualitative inquiry, it is important that the researcher openly explicates his or her standpoint and pre-knowledge, because the earlier experiences evidently have an effect on the expected results. As the study of Jesus’ talks was carried out from the educationalist and psychologist viewpoint, it was wise to explicate the educational–psychological standpoints which were assumed to be known. Thus, the main findings of constructivist and cognitive psychology were given to the reader.

From the constructivist psychology viewpoint, the two modes of thinking, paradigmatic or logical-scientific and narrative, are important. With both these modes, the individual experiences are organized and given meaning, and the problem solving is explained and ordered (Bruner 1986, 11; 1996, 39, 130). In the logical-scientific mode, we try to explain the physical reality with the tools of, e.g., logics, mathematics, and sciences (Bruner 1996, 39). With narrative thinking, on its behalf, we have explained human behavior and psychic reality – we have attempted to create connections with different facts. The logical-scientific mode is based on formal and functional structures of sentences, whereas the narrative model is focused on affective and functional structures of sentences; in the narrative mode, intentions, goals, subjective experiences, and characteristics of individuals are in focus (Bruner 1986, 50; 1990a, 710). On the other hand, the logical-scientific thinking is based on empirical evidence and logical proofs, while the narrative thinking is based on segments of “not truth”, “truth-likeness”, and “verisimilitude” (Bruner 1985, 97). Even though the story may not be “true” in a strict sense (like Jesus’ parables), it still can be charmingly truthful and credible (Bruner 1985, 113) – the criteria for narrative thinking is life likeliness and real-life sense (Bruner 1986, 11).

The division of narrative and logical mind was later used intuitively when classifying the mnemonic units in Jesus’ talks into certain categories of mnemonic tools, such as “Narrative”, “Explanation of the Narratives”, or “Argument”. Also, the basic tenet of constructive psychology, namely, that the new things are constructed on the top of what is already known, was used with categories such as “Connecting teaching with a common concept from the everyday life”, “Connecting a new thing to something known/learnt earlier”, and “Citation of the Bible or/and oral literature”.



From the cognitive psychology viewpoint, the universal computational laws in brains, as far as they are known in the state of the art of contemporary cognitive psychology, are important. The intellectual properties of humans have not changed much – if at all – during the last 2000–5000 years. One can assume that there are certain mental operations that are common with a modern individual and an ancient individual. Thus, it is possible to make inferences of intellectual processes of Jesus' speeches using modern vocabulary and concepts. Cognitive psychology (since Neisser 1967, Eysenck & Keane 2005) has tried to solve the universal computational laws of human brains. Cognitive psychology has intensively been working, e.g., with the working memory (e.g., Baddeley 2000, Engle 2002, Conway *et al* 2003, Conway *et al* 2005) and development of language (e.g., Carrol 1994, Whitney 1998, Harley 2001, Jay 2003). Taylor (1984, 223) reminded that there has to be a common biogenetical and personal developmental ground in our minds – otherwise, it would be impossible to communicate with each other. He also reminded (*ibid.*, 212) that the language skill (i.e., our thinking) is based on biological factors, but this biological capacity requires cultural expression. According to Bruner (Bruner 1983, 164; 1986, 114), we use language to communicate, order things, construct realities, and differentiate between things.

From the constructive point of view, cognitive operations such as connecting, differentiating, comparing, ordering things, or constructing realities can be thought to be universal triggers to save information (semantic memory) and stories and experiences (episodic memory) in our mind. This pre-knowledge of cognitive triggers was used when classifying the mnemonic units in Jesus' talks into certain categories of mnemonic tools, such as "Doubles"<sup>7</sup>, "Expression of opposite"<sup>6</sup>, "Triples"<sup>8</sup>, "Counterparts"<sup>9</sup>, "Comparison"<sup>8</sup>, and "Expression of extreme values"<sup>8</sup>.

Besides studying the effectiveness of a speaker, it is also important to note the classical rhetorical elements of the speeches. Thus, it is useful to utilize the Aristotelian rhetoric. Actually, there is a connection between Aristotelian rhetoric and constructive and cognitive psychology. For example, Feldman *et al.* (Feldman *et al.* 1990, 220) connected the division of logical thinking and narrative thinking with the classical Aristotelian rhetoric. They reminded that in the Aristotelian rhetoric, the cognitive processes of mind are divided into two: emotional and rational, as suggested by the

---

<sup>7</sup> We can connect a whole variety of things together, e.g., "black *and* white". In the example, *two* colors are connected (connecting same things), *separate* colors are connected (connecting different things), and metaphorically *opposite* colors are connected (connecting two extremes). It depends on the situation and the intellectual level of the listener, on what he/she hears and understands.

<sup>8</sup> One frequently used method in oral narratives is to combine three things together. Sometimes, the expression of three things has been intensified by adding gradual increase or decrease, like in "gold – silver – copper" (Mt 10:9), "good soil gives 100 – 60 – 30" (Mt 13:8), and "five – two – one talents" (Mt 25:15) for gradual decline.

<sup>9</sup> Some simple ways to make order in concepts and things are: (1) to separate the counterparts in a nominal way without specific connector: "big – small" or "light – heavy"; (2) to use explicit comparative comparison, such as "bigger – smaller" or "lighter – heavier"; (3) to order things is to express superlatives, such as "highest – smallest" or "lightest – heaviest"; and (4) to use general expressions of (ultimate) extremes, such as "many", "all", "always", or "in the end".

contemporary psychology. The three types of rhetorical “proof” or modes of persuasion, i.e., the ways of convincing the listener of the message, *ethos*, *pathos*, and *logos* (Aristotle 1926), can be divided, so that *ethos* and *pathos* fall to emotional or narrative mode and *logos* falls to rational or logical mode.

The pre-knowledge of rhetorical devices was intuitively used when forming categories, such as “Rhetorical question”, “Activating the audience”, “Personal contact to audience”, “Collective contact to audience”, “Weighting the important matter”, “Showing or expressing emotions”, “Producing positive emotions”, “Producing negative emotion”, “Argument”, and “Structural repetition”.

### Remarks on the pre-knowledge of cultural and historical issues

During the coding process, the grounding question was: “if I, as a Second Temple period Jewish listener, would have been hearing this saying, talk, or speech *why* I would have remembered this teaching?” For a modern reader of Matthew, it may be somewhat difficult to know what things are implicitly assumed to have been known by the audience, what kinds of expressions would amuse the audience, or which would create disgust. However, for a researcher with qualitative methodology, it is important to understand what the original listeners heard and felt when they heard the stories, talks, teachings, and speeches. Of course, it is impossible to forget the modern education and think solely as a historical person. However, one must try to comprehend as near as possible. This was tackled by a preliminary study of second temple period Jewish learning atmosphere, as well as the teaching and learning traditions on the basis of Hebrew Bible, Talmud, and the relevant research literature.

Consciously, the oldest layer in Talmud (Epstein 1935) was tried to seek – the Tannaic or pre-Tannaic tradition (200 B.C.E – 100 C.E.) – to infer something of the educational atmosphere in the beginning of the Common Era. The younger layers – late-Tannaic and Amoraic tradition (100 C.E. – 350 C.E.) were used when they were either supporting the ideas coming from the earlier layer or when it gave some valuable insights that may color the view of the educational atmosphere or practices in Palestine, and which are thought to have relevance in understanding the mentality in the beginning of the Common Era.

When it comes to the research literature, initially, the publication of Jewish-Christian think-tank, The Jerusalem School of Synoptic Research (*Jerusalem Perspective*, online in <http://www.jerusalem-perspective.com>), was very useful. The think-tank aims to present the life and teaching of Jesus in their original cultural and linguistic settings; it has specialized to reveal the Jewish roots of Jesus and the sociocultural and spiritual phenomena of Jesus’ time. In addition, Brad H. Young’s doctoral thesis, *The Parables: Jewish Tradition and Christian Interpretation* (1998), his later studies of rabbinic literature (Young 2007a, 2007b), and David Bivin’s *New Light on the Difficult Words of Jesus* (2005) were also very useful. Also, David H Stern’s *Jewish New Testament and its Commentary* (1989) was a great eye-opener. Topics such as “Fathers teaching” (e.g., Mt 5:21, 27, 31, 33, 38, 43), thinking of Pharisees (e.g., Mt. 9:10–13, 12:1-8, 12:10-14, 15:3, 19:7–9), rabbi testing other rabbi in a positive manner (Mt 22:35, 19:3, 22:23-33) or in a negative manner (e.g., Mt. 22:15, Lk. 10:25), and the *kal v’chomer* argumentation<sup>10</sup> (Mt

---

<sup>10</sup> The logic in *Kal v’chomer* (“light and heavy”) reasoning, well-known in Rabbinic literature, is that if a lighter element is valid (like birds or flowers are taken cared of), then a much more heavier element is also valid (like humans are taken cared of).

6:25, 26, 30, 7:11, 10:25, 31, 23:17, 19, 23) were found in these sources. Founding categories, such as “*Kal v’chomer* argumentation”, “Citation of Bible or/and oral literature”, “Idea beyond a common sense”, “Peculiar idea (to a listener)”, “Humor”, and “Word play” utilized the pre-knowledge of these historical and cultural issues.

### **Remarks on the source text and its characteristics**

One additional element in GTM with a historical dataset is the source text and its characteristics. The basic text to analyze Jesus’ speeches was the Gospel according to Matthew. There are also three other canonical documents available: Gospels according to Mark, Luke, and John, and several non-canonical collections of Jesus’ talks and sayings. Matthew was selected because of some specific characteristics that make it more interesting than the other writings.

First, the canonicity makes the more tested text, more known to an average western reader than some other none-canonical texts, such as the later Gospel according to Thomas, which includes purely the teachings of “Jesus” and which is quite widely debated in the recent literature (see, e.g., Dundenberg 2006, Uro 1998, 2003). Compared to Matthew, Thomas is considered to be a much older product – Matthew is more original and closer to the original historical person, Rabbi Jesus, a travelling Sage (see, e.g., Köstenberger 1998, Bivin 2005).

Second, old tradition claims that Jesus’ student Matthew collected and wrote Jesus’ talks and sayings quite early – according to Eusebius, Irenaeus, and Papia, maybe round AD 60. Eusebius wrote in his *Church History* that Church Father, Papia (ca. 130–140 C.E.) told that “*Matthew wrote the oracles [Jesus’ words] in the Hebrew language, and every one interpreted them as he was able.*” (Eusebius III 39:16). Irenaeus (ca. 180 C.E.) wrote that “*Matthew also issued among the Hebrews a written Gospel in their own language, while Peter and Paul were evangelizing in Rome and laying the foundation of the Church*” (Iraenus III 1:1) which happened round 60 C.E. It is possible that the disciple, Matthew, collected some kind of Hebrew “Urevangelium” which may have been a basis for other writers as well as the later editor of the Gospel according Matthew as we know it today<sup>11</sup>.

Third, the viewpoint of Matthew is interesting. The longest speeches have been collected in Matthew when compared with the other canonic writers. Matthew narrated the Gospel story mainly to the Jews who were interested in learning and were familiar with the rabbinic customs. Among others, Stern (1989, 4, 16) reminded the fact that the style and wordings in Matthew is more Jewish than in the other Gospels. For example, the play with Jesus’ Hebrew name, *Jeshua*, and “who will save” *Jeshoa* in Matthew 1:21, is purely Hebraism, as is the euphemistic expression “Kingdom of Heavens” (*malkhut-haSammayim*, note, in plural) which occurs 14 times in Matthew’s work, when compared with Mark and Luke who systematically used more straightforward non-Jewish expression, “Kingdom on God”. Several Jewish customs have

---

<sup>11</sup> It may be worth noting that nowhere in the Gospel according to Matthew, there has been a mention on who wrote the book. However, in any phase of early history, no one other than Matthew was mentioned as the writer. It is possible that the final edition in Greek was done by an unknown (Christian) scholar, Scribe, because there are many explicit discussions between Jesus and Scribes in the book.

not been explained, but are implicitly expected to have been known. There are several long collections of segments of Jesus' talks in Matthew, which could have been used as the basis for analyzing Jesus' characteristics as a teacher.

Fourth, from the educational viewpoint, Matthew also provided quite plausible picture of Jesus as teacher. There are many examples of Jesus' teaching methods, practices, reactions towards the students, etc. For example, Matthew hinted interestingly that Jesus spoke – as a good teacher do – same topics for different audience with slightly different wordings. For example, the famous “Matthew effect” has been mentioned twice, first in a shorter version in Matthew 13:12 and the whole story in Matthew 25:14–30. Another example is the moral teaching in Matthew 5:29–30, which has been repeated in Matthew 18:8–9. The third example is the reaction of Jesus towards the Pharisees with a reference to Jonah, once in short version and once with explanation in Matthew 12:39 and 16:4. Thus, from the educationalist viewpoint, Matthew would be a good source for the study.

Challenge in the Matthew (as well as the other Gospels too) is that only fragments of Jesus' talks and teachings are collected in the Gospels. It is improbable that the students purposefully manipulated or invented Jesus' teachings – they remembered them accurately as was the custom in the oral literature (see Gerhardsson 1989, 2001, 2004). Thus, what was remembered was most probably remembered accurately. However, when the purpose is to create an image of Jesus' effectiveness as a speaker, there are two challenges. First, we may miss the real authentic atmosphere of Jesus' teaching sessions and hence, we cannot actually say much about how Jesus moves, mimics, and intones during the teaching sessions and discussions. In the best case, we may only have the contents, way of wording of the teachings, and the result of the teachings. Second, it is a challenge that only a portion of the speeches from myriads of teaching sessions has been documented in the Gospels – and those portions are not necessarily in an authentic order, though the main lines may be clear. Fragmented structure is evident, e.g., in Matthew 15:32 where Jesus says that the crowds “*have been with me for three days*” – and Matthew did not report any talks or speech during the days that most probably was not the actual fact. Same can be seen in Matthew 14:13–15, where the crowds have been with Jesus all day – and no talks are reported. The famous talk, The Sermon on Mount (Mt 5:3–7:27), lasts 20 minutes, when heard/read in a tape. Intuitively, it seems quite a short and waste of time (walking to the mount and back) for one of the most cited teaching sessions in history. Therefore, it is highly probable that during those days, students and the crowd heard more things in addition to what has been documented in Matthew – or we can read these teachings somewhere else in the Gospels.

The bottom line is that we need to base the study on these fragments of teachings which are documented in the text of Matthew. From the qualitative-research viewpoint, the historical-critical discussion of whether the citations are *Ipissima verba* of Jesus or not is irrelevant (see discussion in Section 2). The task is to study what is in the text and to create a theory on the basis of it.

The text was read primarily in Greek and secondarily in English. The primary text used was an interlinear Greek Novum text “Textus receptus” by Erasmus of Rotterdam (1516), which is based on old Byzantine text format. Some alternative reading possibilities have been added on the basis of Wescott and Hort New Testament (1881), and all these are available online.

#### 4.4 Criteria for the trustworthiness of a GTM study

An additional specific issue in qualitative research, though relatively sparsely seen in reports, is the discussion about the trustworthiness of the process and results. One can justifiably ask the following questions: How reliable or plausible are the results and conclusions of a qualitative inquiry? How truthful or plausible is the categorization? How are the results applicable? Have some other researchers classified the units in a different way? Has another researcher found a different amount of units for each category? How objectively the text is read and the analysis is conducted? Usually, these kinds of questions related to *Internal Validity*, *External validity*, *Reliability of scorers*, *Accuracy*, *Consistency*, and *Objectivity* are not asked when it comes to qualitative inquiry. However, these questions are briefly tackled on the basis of Lincoln and Guba (1985, 290). Giorgi (1988, 3—6) pointed out that the trustworthiness in qualitative oriented research is not based only the properties of the method used. Thus, the concepts from quantitative research, such as validity, reliability, or objectivity are not relevant in qualitative research, but the criteria for reliable inquiry can be seen in the analysis of the process.

Instead of internal validity, external validity, reliability, and objectivity, Lincoln and Guba (1985) presented the concepts of *Truth Value*, *Applicability*, *Consistency*, and *Neutrality* to cover the different aspects of trustworthiness of a qualitative inquiry. These are discussed generally from the viewpoint of GTM study, and specifically from the application viewpoint.

The criterion for *Truth Value* is usually equivalency or credibility (Lincoln & Guba 1985, 294–296). A qualitative study is trustworthy if one can show that there is equivalency between the actual world and the interpretation of it made by the researcher. When the categories in GTM have been connected to numerous examples from the source text, the classification is credible. It is always possible to find more categories or combine the categories to more general classes, depending on the pre-knowledge of the researcher.

The criterion of *Applicability* is defined as the transferability of the results from specific situation to another parallel phenomenon in a different situation (Lincoln & Guba 1985, 296–298). In the case of Jesus' talks, the results of GTM process would be transferable when the categories could be used to analyze or understand some *other* contemporary speaker than Jesus. In fact, it could be interesting to compare the mnemonic tools of some famous rabbi at the time – like the great teachers, Hillel and Shammai, who lived and taught one generation earlier than Jesus, or Rabban Gamaliel, who lived at the time of Jesus. Another form of transferability could have been the comparison of the Gospel according to Matthew and John, for instance. The style in John is rather different than in Matthew. Would there be same categories – or something else? However, in this study, these kinds of comparisons are not made. However, intuitively, the results seem to make sense when thinking of a modern speech maker. Hence, the results may be transferable from different situation to another parallel phenomenon. It is good to remember that the purpose of the GTM is to create two theories: substantive one (for a specific situation) and formal one (for a general situation). Thus, a good GTM study is applicable when the formal theory is derived.

The criterion for *Consistency* is the evaluation of research situation and working reliability (Lincoln & Guba 1985, 298–299). The qualitative research is trustworthy, when the analysis is possible to do the same way in another research situation. The GTM is developed to standardize the qualitative analysis process. The

process itself is described in Section 3.2. Hence, the method itself can be generalized consistently. In the application, all the speeches were analyzed several times and the coding scheme was checked after analyzing each speech. However, the in-depth analysis of the mnemonically intensive segments might show that it may be possible to find more mnemonic hooks than was found.

The criterion for *Neutrality* is the affirmativeness of the study (Lincoln & Guba 1985, 299–301). The qualitative inquiry is trustworthy, if the same result is obtained with other methods too – the results are not based on the researchers' own (unknown) logics. The GTM is usually a much stricter method than the traditional content analysis, and thus, the same results may be obtained by any other content analysis method. However, it is highly possible that researchers with different education and experiences would be able to find different – less or more varieties of – mnemonic tools. In this way, the vulnerability of the qualitative inquiry over the quantitative research is evident: in the quantitative or statistical research, the use of the same methods in the same data guides the researchers to an identical conclusion, regardless of the experiences of the analyst. Contrarily, the results in qualitative analysis – even with the same data and the same methods – are quite dependent on the experiences and talents of the analyst, as indicated by Strauss and Corbin (2000, 276). A total of 35 relevant categories were found which was considered sufficient.

Thus, it can be concluded that in the usual case, the GTM study's process and results carry True Value, are probably Applicable, are Consistent, and fulfill the criterion for Neutrality. Hence the results of GTM study are as trustworthy as any other qualitative study. However, it is possible – and even probable – that in the case of Jesus' mnemonic tools, more exhaustive linguistic analysis would change the frequencies in the categories. However, it is likely that the main results and inferences would stay intact.

## 5. Conclusions

As a state-of-the-art qualitative inquiry and content analysis, GTM is one of the most trusted and documented methods in social sciences and in education. It was created in 1967 to formalize the numerous and confusingly heterogeneous field of qualitative content analysis. The aim and a strong feature of the GTM is the process of discovering a theory – either a substantive local one, concerning the data itself, or a formal general one, also concerning other observations or domains than those present in the dataset.

This article demonstrated how the GTM can also be used with historical datasets. The specific features of the historical datasets were discussed: obligation for using abductive reasoning, pre-knowledge of the historical settings and thinking, and discussion of the characteristics of the historical documents. When touching on the complex social realities of a historical society or individual, experienced researchers have an advantage over novice ones in being able to connect the pre-knowledge of human behavior and universal laws – such as the results of psychology, sociology, theology, or education – to the process.

To date, GTM has not been used as a tool in historical or theological research. This article is presumed to encourage more researchers in these areas to deepen their methodological toolbox with advances of GTM, and to join the global network of Grounded Theorists.

## References

- Aristotle (1926).** *Rhetoric*. Ed. **J.H. Freese**. Aristotle in 23 Volumes, Vol. 22, translated by J. H. Freese. Aristotle. Cambridge and London. Harvard University Press; William Heinemann Ltd. 1926. Retrieved from <http://www.perseus.tufts.edu/cgi-bin/ptext?lookup=Aristot.+Rh.+1.1.1>.
- Baddeley, A. (2000).** The episodic buffer: A new component of working memory? *Trends in Cognitive Sciences*, 4(11), 417-423.
- Bafile, C. (2005).** "You Must Remember This" ... Teaching with Mnemonics. *Education World*. Professional development article. Retrieved from [http://www.education-world.com/a\\_curr/profdev/profdev117.shtml](http://www.education-world.com/a_curr/profdev/profdev117.shtml).
- Bivin, D. (2005).** *New Light on the Difficult Words of Jesus. Insights from His Jewish Context*. Holland, MI: En-Gedi Resource Center.
- Bruner, J.S. (1983).** In Search of Mind. Essays in Autobiography, New York: Harper & Row. Publishers.
- Bruner, J.S. (1985).** Narrative and Paradigmatic Modes of Thought, In **E Eisner** (Ed.): *Learning and Teaching the Ways of Knowing*, Chicago, Illinois: The University of Chicago Press.
- Bruner, J.S. (1986).** *Actual Minds, Possible Worlds*, Cambridge, Massachusetts: Harvard University Press.
- Bruner, J.S. (1990a)** Culture and Human Development: A New Look. *Human Development* 33 (6), 344–355.
- Bruner, J.S. (1990b).** *Acts of Meaning*, Cambridge, Massachusetts: Harvard University Press.
- Bruner, J.S. (1996).** *The Culture of Education*, Cambridge, London: Harvard University Press.
- Bryant, A. (2003).** A Constructive/ist Response to Glaser [25 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 4(1), Art. 15, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0301155>.
- Bryant, A. & Charmaz, K. (2007a).** *The Sage Handbook of Grounded Theory*. London: Sage.
- Bryant, A. & Charmaz, K. (2007b).** Grounded Theory Research: Methods and Practices. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 1–28.

- Carroll, D. (1994).** *Psychology of Language*. 2<sup>nd</sup> edition. Brooks/Cole.
- Charmaz, K. (2000).** Grounded Theory: Objectivist and Constructivist Methods. In **N.K. Denzin & Y.S. Lincoln** (Eds), *Handbook of Qualitative Research*. Second Edition. London: SAGE Publications.
- Charmaz, K. (2001).** Qualitative interviewing and grounded theory analysis. In **J. Gubrium & J. Holstein** (Eds.), *Handbook of interview research: Context and method*. Thousand Oaks, CA: Sage. 675–694.
- Charmaz, K. (2006).** *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. London: Sage.
- Charmaz, K. & Mitchell, R.G. (2001).** Grounded theory in Ethnography. In **P. Atkinson, A. Coffey, S. Delamont, J. Lofland** (Eds.), *Handbook of Ethnography*, London: Sage.
- Conway, A.R.A., Kane, M.J., Bunting, M.F., Hambrick, D.Z., Wilhelm, O. & Engle, R.W. (2005).** Working memory span tasks: A methodological review and user's guide. *Psychol. Bull & Review*. **12**, 769–786.
- Conway, A.R.A., Kane, M.J. & Engle, R.W. (2003).** Working Memory Capacity and Its Relation to General Intelligence. *Trends Cogn. Sci.* **7**, 547–552.
- Dentzin, N.K. (2007).** Grounded Theory and the Politics Interpretation. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 454–471.
- Dey, I. (1993).** *Qualitative Data Analysis: A User-Friendly Guide*. London: Routledge.
- Dey, I. (1999).** *Grounding Grounded Theory: Guidelines for Qualitative Inquiry*. Orlando FL: Academic Press.
- Dey, I. (2007).** Grounding Categories. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 167–190.
- Dick, B. (2007).** What Can Grounded Theorists and Action Researchers learn from Each Other. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 398–416.
- Dunderberg, I. (2006).** *The Beloved Disciple in Conflict? Revisiting the Gospels of John and Thomas*. Oxford University Press
- Engle, R.W. (2002).** Working Memory Capacity as Executive Attention. *Current Dir. in Psychol. Sci.* **11**, 19-23.



**Eusebius Pamphilius:** *Church History*. Retrieved from <http://www.ccel.org/ccel/schaff/npnf201.toc.html>.

**Eysenck, M.W. & Keane, M.T. (2005).** *Cognitive Psychology: A Student's Handbook*. 5<sup>th</sup> edition. Psychology Press.

**Feldman, C.F., Bruner, J., Renderer, B. & Spitzer, S. (1990).** Narrative comprehension. In **B.K. Britton & A.D. Pellegrini** (Eds.), *Narrative Thought and Narrative Language*. 1-78. Hillsdale, NJ: Lawrence Erlbaum Associates.

**Flavius, J. (1998a).** *Contra Apionem*. In *The New Complete Works of Josefus*. Translated by William Whiston. Revised and expanded version. Kregel Publications. Retrieved from <http://www.ccel.org/ccel/josephus/works/files/works.html>.

**Flavius, J. (1998b).** *Antiquitates Judaicae*. In *The New Complete Works of Josefus*. Translated by William Whiston. Revised and expanded version. Kregel Publications. Retrieved from <http://www.ccel.org/ccel/josephus/works/files/works.html>.

**Flavius, J. (1998c).** *Bellum Iudaicum*. in *The New Complete Works of Josefus*. Translated by William Whiston. Revised and expanded version. Kregel Publications. Retrieved from <http://www.ccel.org/ccel/josephus/works/files/works.html>.

**Gerhardsson, B. (1998).** *Memory and Manuscript: Oral Tradition and Written Transmission in Rabbinic Judaism and Early Christianity: with Tradition and Transmission in Early Christianity*. Eerdmans Pub. Co.

**Gerhardsson, B. (2001).** *The Reliability of Oral Tradition*. Hendrickson Publishers.

**Gerhardsson, B. (2004).** Illuminating the Kingdom: Narrative meshalim in the synoptic gospels. In **H. Wansborough**, *Jesus and the oral Gospel tradition*. Continuum International Publishing Group. 266–309.

**Gibson, B. (2007).** Accommodating Critical Analysis. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 436–453.

**Giorgi, A. (Ed.) (1988).** *Phenomenology and Psychological research*. Pittsburgh: Duquesne University Press. 8–21.

**Giorgi, A. (1992).** Description vs. interpretation: competing alternative strategies for qualitative research. *Journal of Phenomenological Psychology* **23**, 119–135.

**Giorgi, A. (1996a).** Sketch of a psychological phenomenological method. In **A. Giorgi** (Ed.) *Phenomenology and Psychological Research*. 7<sup>th</sup> edition. Duquesne University Press, Pittsburgh. 8–22.

**Giorgi, A. (1996b).** The Phenomenological Psychology of Learning and the Verbal Learning Tradition. In **A. Giorgi** (Ed.) *Phenomenology and Psychological Research*. 7<sup>th</sup> edition. Duquesne University Press, Pittsburgh. 8–22.

**Giorgi, A. (1997).** The Theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology* **28**, 235–261.

**Glaser, B.G. (1978).** *Theoretical Sensitivity. Advances in the methodology of Grounded Theory*. Mill Valley, CA: Sociology Press.

**Glaser, B.G. (1992).** *Emergence vs Forcing: Basics of Grounded Theory Analysis*. Mill Valley, CA: Sociology Press.

**Glaser, B.G. (2001).** *Grounded theory perspective: conceptualization contrasted with description*. Mill Valley: Sociology Press.

**Glaser, B.G. (2007).** Doing Formal Theory. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 97–113.

**Glaser, B.G. & Strauss, A.L. (1967).** The discovery of grounded theory: Strategies for Qualitative Research. Chicago: Aldine Publishing Company.

**Greckhamer, T. & Koro-Ljungberg, M. (2005).** The erosion of a method: Examples from grounded theory. *International Journal of Qualitative Studies in Education*, **18**(6), 729–750.

**Harley, T. (2001).** *The Psychology of Language: From Data to Theory*. 2<sup>nd</sup> edition. Psychology Press.

**Hood, J.C. (2007).** Orthodoxy vs. Power: The Defining Traits of Grounded Theory. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 151–164.

**Irenaeus.** *Against Heresies*. Retrieved from <http://www.ccel.org/ccel/schaff/anf01.ix.iv.ii.html>.

**Jay, T. (2003).** *The Psychology of Language*. New York: Prentice-Hall.

**Legewie, H. & Schervier-Legewie, B. (2004).** ‘Research is hard Work, it’s Always a bit Suffering. Therefore, on the Other Side Research Should be Fun.’ Anselm Strauss in Conversation With Heiher Legewie and Barbara Schervier-Legewie. *Forum Qualitative Sozialforschung / Forum: Qualitative Social*

*Research*. Retrieved from <http://www.qualitative-research.net/fqs-texte/3-04/04-3-22-e.htm>.

**Lembert, L.B. (2007)**. Asking Questions of the Data: Memo Writing in the Grounded Theory Tradition. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 245–264.

**Lincoln, Y. & Guba, E. (1985)**. *Naturalistic inquiry*. Beverly Hills, CA: Sage.

**Martikainen, M. & Haverinen, L. (2004)**. Grounded theory method in Educational Research. In **P. Kansanen & K. Uusikylä** (Eds.), *Many sides of research for teaching*. PS-kustannus. Juva: WS Bookwell Oy [in Finnish].

**Meier, J.P. (1999)**. The Present State of the 'Third Quest' for the Historical Jesus: Loss and Gain. *Biblica* **80**, 459–487.

**Metsämuuronen, J. (2008)**. Basics of Qualitative Research. International Methelp Oy. Jyväskylä: Gummerus Kirjapaino Oy. [in Finnish]

**Neisser, U. (1967)**. *Cognitive psychology*. New York: Appleton-Century Crofts.

**Olesen, V.L. (2007)**. Feminist Qualitative Research and Grounded Theory: Complexities, Criticism, and Opportunities. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 417–435.

**Reichertz, J. (2007)**. Abduction: The Logic of Discovery of Grounded Theory. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 214–228.

**Seaman, J. (2008)**. Adopting a Grounded Theory Approach to Cultural-Historical Research: Conflicting Methodologies or Complementary Methods? *International Journal of Qualitative Methods*, 7(1), 1–17.

**Stern, D.H. (1992)**. *Jewish New testament Commentary*. 6<sup>th</sup> Edition (1998). Clarksville, MA.: Jewish New testament Publications.

**Stern, P.N. (2007)**. On solid Ground: Essential Properties for Growing Grounded Theory. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 114–126.

**Strauss, A.L. (1987)**. *Qualitative Analysis for Social Research: Grounded Theory Methodology*. New York: Cambridge University Press.

**Strauss, A.L. & Corbin J. (2000)**. Grounded Theory Methodology. In **N.K. Denzin & Y.S. Lincoln** (Eds.), *Handbook of Qualitative Research*. Sage Publications, Thousand Oaks. 273–285.

**Strauss, A.L. & Corbin, J. (1990).** *Basics of Qualitative Research: grounded theory procedures and techniques*. 1<sup>st</sup> Edition. London: Sage.

**Strauss, A.L. & Corbin, J. (1998).** *Basics of Qualitative Research: grounded theory procedures and techniques*. 2<sup>nd</sup> Edition. Newbury Park: Sage.

**Taylor, T.J. (1984).** Linguistic Origins: Bruner and Condillac on Learning How to Talk. *Language & Communication* 4(3), 209–224.

**Timmermans, S. & Tavory, I. (2007).** Advancing Ethnographic Research through Grounded Theory Practice. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 493–512.

**Titscher, S., Meyer, M., Wodak, R. & Wetter, E. (2000).** *Methods of Text and Discourse Analysis*. London: Sage.

**Urquhart, C. (2007).** The Evolving Nature of Grounded Theory Method: The Case of the Information Systems Discipline. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 339–360.

**Uro, R. (Ed.) (1998).** *Thomas at the Crossroads. Essays on the Gospel of Thomas*. Edinburgh: T&T Clark

**Uro, R. (2003)** *Thomas. Seeking the Historical Context of the Gospel of Thomas*. Edinburgh: T&T Clark.

**Whitney, P. (1998).** *The Psychology of Language*. Houghton Mifflin.

**Wiener, C. (2007).** Making teams Work in Conducting Grounded Theory. In **A. Bryant & K. Charmaz** (eds.), *The Sage Handbook of Grounded Theory*. London: Sage. 293–310.

**Young, B.H. (1989).** *Jesus and His Jewish Parables*. Mahwah, NJ: Paulist press.

**Young, B.H. (2007a).** *The Parables. Jewish Tradition and Christian Interpretation*. Peabody, Mass.: Hendrickson Publishers, Inc.

**Young, B.H. (2007b).** *Meet the Rabbis. Rabbinic Thoughts and the Teaching of Jesus*. Peabody, Mass.: Hendrickson Publishers, Inc.