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INTEGRATED INFORMATION

International Conference on Integrated Information

Kos, Greece September, 29 – October, 3 2011

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Aims and Scope of the Conference

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

Topics of general Interest

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

Symposia

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Rrepositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

Paper Peer Review

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

Thanks

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDc Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

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KEYNOTE SPEAKER

Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

The Role of Information and Disinformation in the Establishment of the Mongolian Empire – A Re-examination of the 13th century Mongolian History from the Viewpoint of Information History

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Abstract: *The topic of this article is a reinterpretation of the establishment of the Mongolian Empire from an information history point of view. At the beginning of the 13th century Genghis Khan united the nomadic Mongolian tribes and established the largest inland empire, never before seen in history. The borders of the new state reached from China in the East and the Carpathians in the West. Research over the past 200 years based the success of this vast empire on many reasons including the nomadic military organization as well as the favorable political situation of that time. In the following I will demonstrate the fact that the role of information and disinformation in this subject was utmost importance.*

Keywords: Military intelligence, Diplomacy, Mongolian Empire, Military technology, Postal system,

I. INTRODUCTION

The notions of information and disinformation are very important in our daily life today. In the 21th century the flow of information is faster than it has been any time before. At the same time governments, companies, political parties make enormous efforts to preserve information from their opponents at all costs. In this competition of getting and saving information disinformation is also a major factor. This phenomenon wasn't different throughout history. From the beginning of time people tried to get as much information as they could about their surroundings, while disclosing as little as possible about themselves. Military activities apply the same tactics. Historians have proved the existence of intelligence services during the time of the states of the Ancient Near East (Dvornik, 1974). A discipline of information history researches the role of the flow of information during wars throughout the history of mankind. This article aims to examine this flow of information and disinformation during the period of the Mongolian conquest in the 13th century. In addition I will examine the bureaucratic institutions of the Mongolian Empire. The role of information and disinformation appears in many different situations during the analysis of the Mongolian conquest. I have divided the presence of these phenomena into four categories: diplomatic relations, military intelligence, postal system, circulation of military technologies.

II. DIPLOMATIC RELATIONS

We can handle the presence of information and disinformation in diplomatic relations and military activities in history as a part of intelligence history. The German historian Hansgerd Göckenjan (2001) published an article dealing with nomadic intelligence, answering some important questions and contributing greatly to this topic. Nevertheless the nomadic intelligence has remained poorly researched. This study brought attention to the importance of strategic intelligence in nomad warfare. Here I have to state that from this point on I will use the strategic and tactical categories as used in B. H. Liddell Hart's indispensible book *Strategy* (1991[2]). On one hand he claims that strategy is the segment in the art of war that minds war in general and the different operational theories and practices. On the other hand tactics is the segment in the art of war that deals with the leading of troops in different battle situations.

Before engaging in larger campaigns, the nomads always tried to gather as much information on the internal situations of opposing forces as it was possible. Accumulating this information was done by using different methods, which can be observed in the events I researched. Firstly I would like to detail the above mentioned diplomatic connections used in nomadic intelligence.

The account given by Friar Julian on his second journey to the east from the Hungarian Kingdom in 1237-38, quotes a letter sent by one of the Mongolian leaders to the Hungarian King, Béla IV. The messenger had been captured by the Suzdal prince before the letter reached the recipient. According to the letter, this envoy was the 30th sent to the Hungarian King, but the Khan had received no reply so far (Dörrie, 1956). We might consider that number of 30 legations is an exaggeration. But a letter from the French traveler Yvo de Narbonne proves the presence of Mongolian envoys in the Hungarian court. The letter states that the Dalmatian governor captured 8 Mongolians, one of which turned out to be of English origin. This person acted as an interpreter and envoy on behalf of the Mongolian Khan, who travelled twice to the court of King Béla IV (Gombos, 1937). On the basis of this information sole, we can state that the envoys of the Mongolian Empire were well prepared and spoke many different languages. The account of Friar Julian's first journey (1235-36) supports this fact as well, which tells us about his meeting with a Mongolian envoy in the course of the Eastern Hungarians. According to the description, the envoy spoke Russian, Cuman, German, Persian and Mongolian (Gombos, 1938). The movement of these envoys in the Mongolian Empire was brought to

perfection in a way which had never been seen before in nomadic states. Using a method practiced by Persians and Arabs, postal stations (called jam) were built throughout the Empire. Below I will give further information on this subject. The Mongolians not only sent but also received many envoys. In the account of Polonus regarding his travel in the court of Güjük Khan, he writes of 3000 envoys from different countries being present at the election ceremony of the Khan (Dawson, 1955). Meanwhile we can notice that in the accounts of monks travelling to the East, only a few pieces of information could be gathered regarding the Mongolian military organization. The main reason for this was that after entering the Empire, the monks were guarded by Mongolian escorts. This implies that although many envoys travelled throughout the Empire, they were successfully hindered from acquiring accurate information regarding Mongolian military. I believe this to be an early version of counter intelligence and disinformation.

III. MILITARY INTELLIGENCE

The military intelligence can be also divided in to two parts: strategic and tactical intelligence. We can find perfect examples for both in the military history of the Mongols. Strategic military intelligence has two major parts as well: one is the above discussed diplomacy, the other are the preliminary campaigns. The goal of these campaigns was not to occupy a territory. During these expeditions the Mongols aimed to gather as many information about an unknown region as they could. In connection with the preliminary or investigative campaigns, we may say that the first Mongolian expedition to the West which started in the autumn of 1219 and ended in 1224 where the ending point was the Russian steppe, is regarded by scholars as a campaign to acquire knowledge of the area in preparation of a large scale attack. A large part of the territory was not occupied by military troops, although the whole area was investigated by them. We may regard this action as a success, since the scattered scout groups travelled the Western territories of the steppe, gathering first hand information on Middle and Eastern Europe.

The other important part of military intelligence is the tactical intelligence. The main goal of these military activities was to serve the campaign's success with information. Fortunately in our sources many precedents of this activity can be found. During the actual large scale attack a method used in acquiring tactical information, was incorporating leaders with a wide knowledge of the terrain. In the case of the Mongolian conquests in Europe, among the works of Jan Długosz, there is a source which suspects Rus captives in Poland, leading the Mongolian troops.

The troops functioning as scout groups were called manglai, which means forehead (Rachewiltz, 2004). Even Friar Giovanni DiPlano Carpini mentions that the scout groups march ahead of the army. He says: "When they are going to make war, they send ahead an advance guard and these carry nothing with them but their tents, horses and arms. They seize no plunder, burn no houses and slaughter no animals; they only wound and kill men or, if they can do nothing else, put them to flight. They much prefer, however, to kill than to put to flight. The army follows after them, taking everything they come across, and they take prisoner or kill any inhabitants who are to be found. Not content with this, the chiefs of the army next send plunderers in all directions to find men and animals, and they are most ingenious at searching them out." (Dawson, 1955)

We can find more precise information in the reports on Mongolians, which can be connected to the Southern Chinese Song dynasty. This source writes that the primary assignment of the scout troops was to settle on the hills and higher terrain that fell in the path of their armies, as well as to capture enemy prisoners. The source also lists the questions with which the troops interrogated their prisoners (Meng-Ta–Hei-Ta, 1980).

In the book entitled The Secret History of the Mongols – wich is the oldest surviving Mongolian literary work -, we can find several references that the scout groups set up camps at certain distances and sent even more troops forward from these points: "Činggis Qa'an sent Altan, Qučar, and Dāritai, as a vanguard; the Ong Qan sent Senggüm, Jaqa Gambu, and Bilge Beki.Patrols were also dispatched ahead of these vanguards: at Enegen Güiletü they set up an observation post; beyond that, at Mount Čekčer, they set up another observation post; and beyond that, at Mount Čiqurqu, they set up a further observation post. Altan, Qučar, Senggüm and the others of our vanguard arrived at Utkiya. While they were deciding whether to camp there, a man from the observation post wich had been set up at Čiqurqu came riding in haste and brought the news that the enemy was approaching." (Rachewiltz, 2004)

Based on this data we can say that the Mongol troops were able to do long-range, efficient exploration on the enemy's territory. The description of these camps can also be found in the reports already mentioned. On the basis of this we know that the horses were both tended to and fed inside of these camps while in normal camps they were kept outside. With this method the Mongol scouts could prove their quick response ability. Another interesting piece of information is that the cooking was done before sunset, and the fires were left burning at night while they moved to a different location to mislead and misinform the enemy.

Overall it can be said that the well organized military intelligence (strategic as well as tactical) was a very important part of the Mongol warfare.

IV. POSTAL SYSTEM

The Mongol postal relay system is very well known from Marco Polo's report. The Mongol postal system was established during the reign of Ögödei (1229-1241), the third son of Genghis Khan. This network of post

stations (jam) was known much earlier in Inner Asia and was used before the Mongols had even established their empire. The vast size of this network was far more extraordinary than any postal system used before (Allsen, 2009). In the 13th century the extent of this network covered almost the whole empire starting from Central Mongolia to China in the East and reached the lower Volga in the West. The aim of this huge and sophisticated system was to help the flow of information and goods throughout the empire. There were three types of postal stations: morin or 'horse' stations for moving people, messengers, and officials; narin or 'careful [-handling]' stations to enable the direct communication with the great khan; and tergen or 'wagon' stations used for the transportation of goods. The jam was maintained by the Mongol military establishment, although the provision of horses and supplies was the responsibility of the local population. The supplies were given by the locals as a tax to maintain these stations. At every relay station horses and other neccesary supplies could be found. Messengers could change their horses at these stations, and by so doing did not have to stop to rest. Important messages could be carried at an accelerated rate. Marco Polo who travelled around China during the Mongol rule says: „Thus it is so expeditiously conveyed from station to station, that in the course of two days and two nights his Majesty receives distant intelligence that in the ordinary mode could not be obtained in less than ten days." (Polo, 1958)

Even though it may sound like an exaggeration, we can say at that time this was the fastest way of transmitting information. To be able to use the services of these postal relay stations the travelers had to have a paiza, which was a Mongol office emblem that served as a passport throughout the empire.

In general we can say the Mongols built up a postal relay system that had been known before, but they developed immensely. This network was the largest, most sophisticated and fastest at that time. It can't be overemphasized that this system and the speed of the information relayed by it, was a huge advantage for the empire against their enemies. As I stated before, the foreign envoys and their Mongol escorts used this system as well. In this way this system also prevented the intelligence activities of other states against the Mongolian Empire. The accurate and fast information flow was one of the Mongol's biggest advantages against their enemies.

V. MILITARY TECHNOLOGY

At the beginning of the 13th century the Mongolian army was equipped with almost the same types of weapons as their nomadic predecessors since the first centuries A.D. As they conquered lands beyond the steppe zone they met with new military technologies. The main difference between them and their predecessors was that they started to use these developments and incorporate them into their warfare. The research of this subject today is well processed, especially in the works of Thomas T. Allsen. In the following I want to summarize his results.

The Mongols interacted with many sedentary people from the Chinese to the people of the Muslim states of Middle- and Western-Asia till the Eastern-European countries. The armies of these states had their own style and equipments of warfare. One of the secrets of the Mongol successes was that they could incorporate these equipments and apply them to their own style of warfare. The biggest innovation of the Mongols was that they did not just incorporate the military techniques, but they captured the enemy technicians. The Mongols regularly moved craftsmen from the occupied lands to the center of their empire (Allsen, 2009). After so doing, these professionals commenced working for the good of the Mongolian Empire. During the campaigns against North China the Mongols sent commissioners (shizhe) into the cities to bring out scholars, artisans and technicians before raiding them. We know from the Chinese sources that the population registers of the Mongols contained separate categories for military, merchant, agricultural and artisan households. With this practice within only a few decades the Mongol rulers created a huge data base that contained a great deal of information about the useful talents in the empire (Allsen, 2009). Allsen state that there existed different types of data bases like maps of strategical points and postal relay systems (Allsen, 2001).

Over all we can say that the Mongols had a systematic practice to incorporate military technology and technicians. With this method they could improve the effectiveness of their army. Moreover we have to say that this practice was not only for military technologies and professionals. Recent researches on this subject clearly proved the fact, Mongols incorporated technologies and experts from many disciplines: for example their taxation system, the state bureaucratic practices, religions, etc.

VI. CONCLUSION

In this article I introduced a new aspect of analysis of the establishment of the Mongolian Empire. The exploration of this subject with the aspect of information history presented the fact that the fast flow of information and the well used disinformation were very important factors in the successful conquers of the Mongols. The well trained diplomats could gather much information from other countries while foreign envoys were prevented from it. The military intelligence was also well organized, and worked effectively in both tactical and strategic dimensions. The subjects of the postal relay system and the military technologies show us a special talent of the Mongols. They not only incorporated and used new technologies and systems, but they also developed and applied them to their attributes. As we can see the threads of information met at the center of the empire. The well organized

information relay system and the data bases helped the great Khans to make the most effective decisions.

In this paper I emphasized those aspects of information and disinformation that were controlled by the state. Another very interesting subject could be those aspects what were not under the control of the state. For example the religious and all the cultural interactions in Eurasia, initiated by the Mongols in the 13th century and after.

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