MJAL5:3 Spring2013 **ISSN 0974-8741**

Computer-Mediated Discourse & Memes by 1. Hamid Reza Kargozari &2.

Dara Tafazoli

Computer-Mediated Discourse & Memes

Hamid Reza Kargozari

Tabaran Institute of Higher Education, Iran

Dara Tafazoli

Islamic Azad University – Science & Research Branch, Iran

Hamid R. Kargozar is a lecturer and Ph.D. student in TEFL at Tehran Payam Noor University, Iran. His current research interests cover issues in ELT, and SLA. He has been involved in a range of projects in the area of applied linguistics. Email: hamidrezakargozari@yahoo.com

Dara Tafazoli is an independent researcher and teacher works at the University of Applied Science & Technology, Mashhad, Iran. He has presented and published a number of papers on Applied Linguistics. He has edited four books such as *Language & Technology: Computer Assisted Language Teaching* (with S. Chirimbu). Email: dara.tafazoli@yahoo.com

MJAL5:3 Spring2013 **ISSN 0974-8741**

Computer-Mediated Discourse & Memes by 1. Hamid Reza Kargozari &2. Dara Tafazoli

Abstract

It is believed that memes play the role of memory devices that can be transferred from one person to another person through spoken or written language. Moreover, Herring (2004) defines computer-mediated discourse as the communication produced by transmitting messages through networked computers. This type of discourse is a good device through which memes can propagate themselves. Computer-mediated discourse causes memes to leap from one brain to another brain. The present study is going to provide a thorough background for both memes and computer-mediated discourse. Furthermore, it aims to investigate to what extent computer - mediated discourse generates and transfers memes among graduates and postgraduates. To this end 60 graduates and postgraduates from different fields of study were asked to fill an attitudinal questionnaire toward memes developed by the researchers. Then, 10 students were randomly selected and interviewed to find out the reasons behind their responses. The results from quantitative and qualitative analyses from the questionnaires and the interviews showed that a considerable number of respondents claimed a large proportion of memes relevant to their field of study is transmitted through computer-mediated discourse. The findings of the study confirm the vital role of computer-mediated discourse for disseminating memes in higher education.

Key words: Computer-mediated discourse, Meme, Ideas, Meme pool, Higher education

MJAL5:3 Spring2013 **ISSN 0974-8741**

Computer-Mediated Discourse & Memes by 1. Hamid Reza Kargozari &2. Dara Tafazoli

Introduction

With the advent of computer and the Internet, new methods of communication have emerged. Computers are widespread devices that people use as a medium to communicate. This change in the way of communication has caused some inventions in other related fields such as discourse. These days we come across frequently with a newly-invented term and it is computer mediated discourse (henceforth CMD). CMD is a branch of computer-mediated communication (henceforth CMC). CMD refers to the communication produced by humans while transmitting message via a computer. The purpose of this study is to investigate whether it is possible to hypothesize that CMD is as a branch of memetics. It means whether CMD can transmit and pass elements of culture nongenetically, for example by imitation. To this end a short review of both CMD is provided, then memes are described and elaborated completely, and finally the study will be explained in details.

Literature Review

Origin of Meme

The term "Meme" was first coined by a biologist called Richard Dawkins. He considered memes just as genes. He suggested as genes disseminate themselves in the gene pool from one person to another person through sperm and eggs, so do the memes. He proposed that memes propagate themselves by leaping from one brain to another brain. This happens by a process called imitation. As genes drive and replicate biological evolution, memes drive and replicate cultural evolution.

Furthermore, the idea of meme was extended by a psychologist called Blackmore in 1999. He considered any information that can be replicated by the process of imitation as a meme. There are many things during our life that are imitated and disseminated by people such as the slogans, fashions, tag lines, etc. All these can be considered as memes than can be spread either consciously or unconsciously. The popularity of meme becomes clear when we come across with the term in many dictionaries. Different dictionaries provide a definition for it.

MJAL5:3 Spring2013 **ISSN 0974-8741**

Computer-Mediated Discourse & Memes by 1. Hamid Reza Kargozari &2. Dara Tafazoli

We can use Blackmore's idea (1999) to characterize memes as any kind of information from ideas, stories, songs, and habits to skills that is emulated from person to person. The science of studying the dissemination and evolution of memes is called memetics.

Memeplex

As genes work together as a group, so do memes. Memes work together to reinforce each other. In group, memes assist one another and for this reason they are called as memeplex (Klimesh 2002). The word consists of two morphs. The first free morpheme is meme and the second morpheme that is a bound morpheme is –plex. This bound morpheme means " a group of". Therefore, memeplex means a group of memes. Blackmore (1999) regards language, religions, and scientific theories as examples of memeplex.

Types of Meme

In the literature we come across with two major types of meme. These include “Genotype of Memes” and “Phenotype of Memes”. The first category refers to the information that has been coded in memes. We can claim that it refers to the transmission of similar information. However, the second category refers to the effects that meme produces in a person. A person can be affected by a meme both cognitively and behaviorally. Sometimes the effect of a meme is only on cognition. Such a kind of impact is hidden and subjective. Therefore, it may happen that the person is influenced by the meme, but the effect is not observable for others. In contrast, the meme can affect the behavior of the person. In this case the effect of that meme is very clear and objective.

Meme Lifecycle

The life period of meme has been divided into four stages: assimilation, retention, expression and transmission (Heylighen 1999). All these four stages form a replication loop and turn in cycles. Assimilation refers to this fact that a successful meme should have the ability to infect other individuals. On the other hand, if a meme wants to enter person's memory, it should be paid attention, comprehended, and accepted by that person. In this case, the meme is stored in

MJAL5:3 Spring2013 **ISSN 0974-8741**

individual's memory. This phenomenon is called retention. The time of storage of a meme in memory is very critical, because this time span determines the ability of meme transmission. The longer the storage of meme, the more new persons can be infected by the meme. During their daily contacts, individuals express memes in different ways. Sometimes they express them by language through words, sentences or discourse, and sometimes they express memes via their behaviors. As soon as a meme is expressed by individuals, they are transmitted to other persons. Once a meme is transmitted to a new individual, a new cycle starts.

Computer Mediated Discourse

Transmitting message from one person to another one via networked computers is called computer-mediated discourse (CMD). Herring (2001) believes that computer-mediated discourse is a branch of computer-mediated-communication (CMC).The focus of CMD is "language and language use in networked computer environments" (Herring, 2001, p. 612). In CMD, networked computers are considered as medium of communication. This medium is distinct from both speaking and writing. For this reason CMD exchanges are faster that written exchanges but slower than spoken exchanges (Herring, 2001).

Contrary to face to face communication that takes advantage of multiple channels, visual, auditory and gestural, Daft and Lengel (1984) consider CMD as a "lean medium" in which only visual channel provides information and it happens through typed texts. Although users apply language only by text, they can compensate paucity of auditory and gestural features in different ways. For this reason, CMD is very expressive. CMD uses computer messaging systems that can be divided into two major types, synchronous and asynchronous. In asynchronous type, there is no need for participants to be online for communication like e-mail or Usenet newsgroups in which messages are store for later use.

However, participants of communication should be online in synchronous type like chat rooms. Another important feature of CMD is the availability of simultaneous feedback. Cherny (1999) relates it to the fact that transmission is one-way or two-way. Contrary to oral

MJAL5:3 Spring2013 **ISSN 0974-8741**

communication that makes use of two-way transmission, CMD mostly takes advantage of one-way transmission in which a message is considered as a single unit. It means the receiver of the message does not know that a message is addressed to him therefore there is no expectation for simultaneous feedback. Herring (2001) classifies different types of CMD based on two factors of transmission and being synchronous (Table 1).

Table 1: Classification of some common CMD modes according to medium variables adopted from Herring (2001)

	one-way transmission	two-way transmission
Synchronous	chat (IRC, webchat, etc.); MUDs and MOOs	UNIX 'talk'; VAX 'phone'; ICQ
Asynchronous	e-mail; e-mail-based systems (listserv discussion lists, Usenet newsgroups, etc.)	----------

Contribution of social and cultural factors involved in communication discriminates CMD from computer technology. Since there are different types of discourse activities happening in CMD and different types of human experiences, multiple approaches to analysis have been invited in CMD. Moreover, CMD have equipped "us to see interconnections between micro- and macro-levels of interaction that might otherwise not emerge by observing spoken or written communication" (Herring 2001, P. 13).

Methods

Participants

The participants of the study were 60 graduates and postgraduates from different majors. They were 26 males and 34 females. They aged between 29 to 42 years old. They were majoring in Mathematics, TEFL, Chemistry, and IT. They were selected from different universities such as Ferdowsi University and Azad University Mashhad and Semnan

MJAL5:3 Spring2013 **ISSN 0974-8741**

Branches. The prerequisite condition for the selection of the participants was not only their availability to the Internet but also using it for doing their studies and research.

Procedure

A questionnaire was developed by the researchers in which some questions were designed to elicit participants' ideas and attitudes toward the memes in their field of study through the Internet and CMD. Here memes were defined as new ideas, styles, theories, hypotheses, and trends in that field of study. The first part of the questionnaire was to be completed by participants' bio data and some questions about different types using the Internet and mediums they use to send and receive data relevant to their fields of study.

The questionnaire main part was composed of twenty Likert Scaled items. They were divided in 4 groups of questions. The first group were the questions about participants' points of view relevant to the transmission of memes through CMD; the second group questions were about the effectiveness of this transmission on the recipients; the third group were the questions which asked stability of transmitted memes in the recipients; and finally the last group of questions was about to what extent the recipients of the memes try to transmit them to others, on the other hand, how much they attempt to support meme lifecycle. All the questions were in participants' mother tongue, Persian. Moreover, 10 participants were interviewed by one of the researchers. The structured- interview was done also in Persian.

Data Analysis & Findings

The first part of the questionnaire revealed that all of the participants used the Internet for searching articles, new theories and hypotheses, experts' points of views, and breakthroughs in their field between four to thirty five hours per week. They claimed that they used different facilities to accomplish this objective. Among the facilities they mentioned were e(lectronic)-mail, chat rooms, chat groups and group discussion in Google, Yahoo and other search engines, Community networks such as U-tube, Twitter, and Facebook, websites and weblogs, and data bases such as Elsevier, Springer, Science Direct, Scopus, Proquest, etc.

MJAL5:3 Spring2013 **ISSN 0974-8741**

As it was mentioned the main part of the questionnaire was divided into 4 parts. The questions of the first part were related to the participants' general attitudes and views about the role of CMD in transmitting memes. Nearly 65% of participants showed a positive reaction toward this fact. They claimed that CMD is among the most common and convenient ways to become familiar with new ideas, concepts, trends and terminologies in their field. Some of them, 58 percent, were not sure what they would do if they did not have access to the Internet and its facilities. During the interview, they said that they were accustomed to searching new trends and ideas by the Internet and CMD.

The second group of questions was about the effectiveness of meme transmission on the recipients. A few of them, only 39 percent, believed that this type of transmission is effective. Effectiveness was interpreted by them as the influence that memes had on their attitudes and views, moreover, the power to create new ideas and attitudes in them. They considered CMD less effective than books and publications. The reason for this was asked during the interview. The interviewees claimed since CMD has an ephemeral nature, it was less effective. Third group questions were about the stability of transmitted memes. Most of them believed the memes transmitted in this way are less stable than other ways. 75% of the participants believed they forgot these memes easily. The reason of this belief was explained by the interviewees. They claimed that since CMD imposed more processing burden on them, they forgot easily. Some of them told the frequency of exposure to memes was very important in determining the stability of them. Finally, by answering the last group of questions, participants showed highly positive attitude toward aiding the lifecycle of memes. More than 85% of participants agreed that they themselves used CMD to transmit memes of their field of study. In this way, they showed they were very willing to use CMD to disseminate memes. Moreover, the interview confirmed this agreement too.

MJAL5:3 Spring2013 **ISSN 0974-8741**

Conclusion & Further Research

Memes are ideas, trends, or fashions that are transmitted from one group to other groups. The advent of the Internet has caused the spread of memes with a faster speed. Sometimes memes reach world wide popularity through the Internet within a few days. These memes can be spread through the Web in different ways such as social interaction groups, chat rooms or e--mails. It is believed that the Internet could substitute all other mediums used for spreading memes. The purpose of this study was to find out to what extent this belief is acceptable. The results of the study confirmed the positive attitudes of CMD users for transmitting memes.

They also claimed that they tried to use help the lifecycle of memes by sending them to others. However, data gathered by both questionnaire and interview showed that the participants did not have positive reaction and attitude toward the effectiveness and stability of transmitted memes through CMD. As a result, CMD is good reputation foe disseminating memes, but more attempts should be done to compensate the drawbacks of it. It seems the negative attitudes toward stability and effectiveness of memes transmitted by CMD is more cultural bias. More studies are needed to replicate the same study with participants from other cultural background.

Participants with more computer literacy may have different ideas about the role of CMD; it means data should be gathered from different level of computer literacy. Moreover, first language seems an influential factor in this case. All these factors can be involved and controlled in future studies.

References

Blackmore, S. (1999). The Meme Machine. Oxford: Oxford University Press.

Cherny, L. (1999). Conversation and Community: Chat in a Virtual World. Stanford: CSLI Publications.

MJAL5:3 Spring2013 **ISSN 0974-8741**

Daft, R. L. & Lengel, R. H. (1984). Information richness: A new approach to managerial behavior and organization design. In B.M. Staw & L. L. Cummings (Eds.), Research in Organizational Behavior, 6.Greenwich, CT: JAI Press. Pp.191-233

Dawkins, R. (1982). Organisms, groups and memes: replicators or vehicles. New York: Oxford University Press.

Douglas C. K (2002). Memes, Christianity and religious experience. Retrieved September 13, 2013 http://home.provide.net/~dougklim/Memedna.htm

Herring, S. C. (2001). Computer-mediated discourse. In D. Schiffrin, D. Tannen, & H. Hamilton (Eds.), The Handbook of Discourse Analysis. Oxford: Blackwell Publishers. Pp. 612-634.

Heylighen, F. (1999). What makes a meme successful? selection Criteria for cultural evolution. Proceedings of Congress on Cybernetics**.** Pp. 418-423.