

ББК 81.2
В87

Редколлегия:

Ю. И. Александров, К. В. Анохин, Б. М. Величковский,
А. А. Кибрик (председатель), А. К. Крылов, Ю. В. Мазурова,
О. В. Федорова, Т. В. Черниговская

В87

Шестая международная конференция по когнитивной науке: Тезисы докладов.
Калининград, 23–27 июня 2014 г. – Калининград, 2014. – 752 с.
ISBN 978-9955-488-86-6

Настоящий сборник включает материалы Шестой международной конференции по когнитивной науке / The Sixth International Conference on Cognitive Science, состоявшейся в Калининграде 23–27 июня 2014 г.

Конференция посвящена обсуждению познавательных процессов, их биологической и социальной детерминированности, моделированию когнитивных функций в системах искусственного интеллекта, разработке философских и методологических аспектов когнитивной науки. В центре дискуссий на конференции — проблемы обучения, интеллекта, восприятия, сознания, представления и приобретения знаний, специфики языка как средства познания и коммуникации, мозговых механизмов сложных форм поведения. В программе конференции также серия специализированных воркшопов, посвященных таким актуальным темам, как концептуальные структуры, особенности развития при билингвизме, проблема зрелости человека, языковая коммуникация, принятие решений. Материалы представляют собой тезисы пленарных лекций, устных и стендовых докладов, а также выступлений на воркшопах. Все тезисы прошли рецензирование и были отобраны в результате конкурсной процедуры. Они публикуются в авторской редакции. В электронном виде эти материалы представлены на сайте конференции (www.conf.cogsci.ru), а также на сайте Межрегиональной общественной организации «Ассоциация когнитивных исследований» (МАКИ, www.cogsci.ru).

ББК 81.2
ISBN 978-9955-488-86-6

Отпечатано в типографии Standartu Spaustuve, Литва.
Телефон в Калининграде +7 4012 77 22 05

© МАКИ

Consumer versus customer: Manifestation of money illusion in the human motivational system (D. Hayrapetyan)	58
Verbal Facebook postings — distributed language and cognition (O.A. Karamalak)	59
Iterated language learning in adults and children (V. Kempe)	60
Inter-locution as the everlasting source of language in the framework of LUIT: Language — a Unified and Integrative Theory (P. Kirtchuk)	62
An fMRI study of naming actions in aphasia: The role of right hemisphere activation (E. G. Kozintseva, M. V. Ivanova, S.A. Malyutina, Yu. S. Akinina, D.A. Sevan, S.V. Kuptsova, A. G. Petrushevsky, O. N. Fedina, E. F. Gutyrchik)	64
Interdisciplinarity as a methodological issue in the study of mind and language (A. V. Kravchenko)	65
Dynamics of unconscious cognitive set extinction with and without realizable feedback (N. S. Kudelkina)	67
Neurosemantic approach and free energy minimization principle (A. B. Lavrentyev)	68
Priming influence on the ability of identifying errors (T. N. Lomaykina, P. Yu. Dekhanova)	70
Information transfer in visual signal: Fractal complexity of sign language vs. everyday motion (E. A. Malaia, A. P. Malyi, J. D. Borneman, R. B. Wilbur)	71
Gender differences in implicit and explicit social information processing in healthy adult volunteers (E. V. Mnatsakanian)	72
Adaptation of information structure in gesture and speech (L. Mol)	73
Visible semantic priming and target effect across Russian and English with bilinguals of upper-intermediate level (O. V. Nagel, I. G. Temnikova)	75
When language and gesture do not converge: Spatial construal of time by speakers of Wan (Mande, Côte d'Ivoire) (T. Nikitina)	76
False belief reasoning and the acquisition of relativization and scrambling in Russian children (M. Ovsepyan, U. Lakshmanan)	77
Introducing Russian action picture naming norms (S. Pashneva)	79
Gender differences: The electrophysiological & behavioral effects of question linguistic prosody on inattention conditions during word processing (A. F. Reyes)	80
How working memory is influenced by processing of emotional information: an event-related fMRI study (R. Rozovskaya, E. Mershina, E. Pechenkova)	81
Probability prognosis in definition of human cognitive function in problem situation (N. A. Ryabchikova, L. V. Bets, B. Kh. Baziyan, P. Halvorson)	83
Non-bona fide discourse: Linguistic signals of play and pretence (K. Shilikhina)	85
How quickly can we send a command to a robot using a non-invasive (eye) -brain-computer interface? (S. L. Shishkin, Y. O. Nuzhdin, A. A. Fedorova, M. N. Faskhiev, A. M. Vasilyevskaya, B. M. Velichkovsky)	87
The effect of multi-modal learning in Artificial Grammar Learning Task (Z. Skóra, M. J. Szul, K. M. Rączy)	89
Morphological ambiguity in the mental grammar: Evidence from Russian (N. Slioussar, N. Cherepovskaia)	90
Frequencies of different grammatical features and inflectional affixes in Russian nouns: A database (N. Slioussar, M. Samoilova)	92
Dynamics of Russian children's moral attitudes toward out-group members (I. M. Sozinova, I. I. Znamenskaya)	94
Functional characteristics of visual high gamma band activity in human visual cortex (M. G. Stepanova, O. V. Sysoeva, T. A. Stroganova)	95
The Ouroboros Model learns to talk, a “chemical” view of grammar and syntax (K. Thomsen)	96
Can primates form the empirical ideas of the elementary reason that is the highest cognitive function according to Immanuel Kant? (D. L. Tikhonravov)	97
Narratives about dignity at different stages of moral development (J. E. Zaitseva)	99
Internet posting content analysis as an instrument of coping investigation (E. Zarubko)	101
Self-organizing evolutionary algorithms, artificial neural networks and classical methods for intelligent systems of data analysis (V. B. Zvonkov)	102
Психосемантическое пространство художественных фотографий (М. М. Абдуллаева)	105
Роль прототипической структуры понятий в процессах вербальной креативности (Е. А. Абисалова, В. Ф. Спиридонов)	106
Эффективность рабочей памяти при разных способах воспроизведения информации (К. А. Абсагова, Р. И. Мачинская)	108
Биоморфные нейросетевые модульные структуры для прогноза временных рядов (А. Н. Аверкин, И. С. Повидало)	109
Взаимоотношение психофизиологических механизмов ранней и поздней селекции при реализации сенсомоторных реакций (Е. К. Айдаркин)	111
Библиотека стимулов «Существительное и объект»: нормирование психолингвистических параметров (Ю. С. Акиннина, Е. В. Искра, М. В. Иванова, М. А. Грабовская, Д. Ю. Исаев, И. Д. Коркина, С. А. Малютина, Н. Ю. Сергеева)	112
Билингвизм — адаптация в языковой сфере? (Н. Ш. Александрова)	114
К обоснованию конструкта «оперирование абстракциями» (И. О. Александров, Н. Е. Максимова)	115
Структура и динамика памяти человека и животных (Ю. И. Александров)	117
Как распознаются печатные словоформы на ранних этапах процесса чтения: параллельное или последовательное сканирование? (Экспериментальное исследование на материале русского языка) (С. В. Алексеева)	119
Изменения биоэлектрической активности мозга при повторном предъявлении знакомых и незнакомых стимулов (А. В. Алешковская, М. С. Сопов)	120
Как устанавливаются границы осознания (В. М. Аллахвердов)	122
Когнитивная функция имплицитной теории доверия (М. В. Аллахвердов)	123
Когнитивные барьеры, мешающие конструктивному урегулированию конфликтов (О. В. Аллахвердова)	125
Семантика звука: психофизиологические механизмы (Н. А. Алмаев, С. О. Скорик)	126
К проблеме взаимосвязей представлений личности о Другом человеке и ее дискриминационного отношения к этнокультурным группам (В. Д. Альперович)	128

CONSUMER VERSUS CUSTOMER: MANIFESTATION OF MONEY ILLUSION IN THE HUMAN MOTIVATIONAL SYSTEM

D. Hayrapetyan

davidhaiarm@gmail.com

Youth Events Holding Center (Yerevan, RA)

In our previous studies, we have investigated in detail manifestation of money illusion and tried to find ways to overcome it. Recall that money illusion (later MI) is a tendency to perceive the nominal value of money and not their real monetary values. The term was first introduced by Fisher (Fisher 1928). We tried to find the other factors of regulation of the MI. As a measurement of MI, we established the willingness to buy products at discounts, offered by the entity in national currency (AMD) and often used in Armenia foreign currency (USD). MI coefficient was calculated by the suggested average price as a percentage of USD/AMD division.

We tried to establish the effect of the use of computational tools (the calculator) to change the level of MI. The results allowed concluding that MI, after the use of the computational tool, did not change and it is a more stable phenomenon. Afterwards, we tried to find the other regulators of MI and put forward another hypothesis: the changes of MI may occur in communication, more specifically, discussion in pairs. The results show a statistically significant difference between the MI individual and MI communication (Hayrapetyan 2012).

Continuing our research we decided to appeal to different displays of MI and explore its manifestation in conjunction with the motivational characteristics of the consumer, especially focusing on the factor whether the customer is a major consumer of goods, for which he pays or only customer of the product, the consumer of which can be another person. The terms “consumer” and “customer” are often used interchangeably, but a consumer and customer are not always the same entity. In essence, consumers use products while customers buy them. A consumer may also be a customer and a customer can also be a consumer, but situations occur where this is not the case (Joseph 2013).

This implies that a financial behavior of buyer and consumer have to be significantly different, if the customer is not a consumer. And this regularity has long been observed and researched in market research. Different marketing strategies, advertising, presentation of goods and prices have been developed on this basis. Marketing strategies aimed at enhancing the interest and needs of the consumer, but even if the customer is not a consumer of the product, he should not be completely ignored by the marketing efforts, since they are the ones who have the

money. But can we persist that MI will appear differently in these two groups even with such a strong view of the differences in the financial behavior of consumers and customers. But even having given such strong differences in the financial behavior of the consumer and customer, are we to believe that MI will appear differently in the two groups.

To do this, we took our study where examinee were supposed to make a purchase as a consumer of a product, or just as a customer for another consumer. Before the discussion of statistical data, it is necessary to introduce one very important fact, that we are forced to take bigger number of examinees than was proposed in the design methodology of the study. The essence of our method was to ask people how much they are willing to pay for the goods (in Armenian AMD and United States USD), given the initial price. Division offered discounts from AMD to USD (the willingness to pay in different currencies) gives us coefficient of MI (Hayrapetyan 2012). But almost 25% of customers offered higher prices for the goods than was proposed as the initial. Such irrational behavior was not observed in none of the consumers. This phenomenon requires a separate study and explanation. We have attracted new examinee in this group and overall the study involved 126 participants: 64 consumer and 62 customer.

Appealing to the general statistics, products presented at AMD were reduced on average by 36.04% while USD 29.62%. As in other studies we have costated the MI coefficient and it was 1.4.

Comparison of the two samples (consumer / customer) was performed by T-Student, but since we have not been ascertained homogeneity of dispersion (Levene's $p=0.17$), Comparison was made by U-Mann-Whitney. Consumers MI coefficient is 1.35, and the customer — 1.45. But the difference is not statistically significant (U-Mann-Whitney $p=.824$).

This allows us to state that the MI does not depend on a human motivation such peculiarity, as to be consumer of good or only it's customer. MI manifests itself as a more persistent phenomenon and observed equally to both consumer and customer. But taking into consideration the phenomenon that customer are prone to excess costs, it makes us to design new methods of diagnosis of MI, which will take over the costs of customers that can radically change the picture of customer's behavior. The latest can be the reason for new researches.

In this study, except the motivation peculiarity to be consumer/customer we have attempted to in-

clude in the system of money behavior regulation and MI manifestation other factors such as

- gender, age
- decision making style (in the system of MBTI)

This allows us to make the multivariate ANOVA and find out the relationship of several factors on the expression of MI. These results will be presented in our next works.

Has been supported by a state grant, the project 13YR-5A0010- "Psychological heuristic mechanisms in consumer's money behavior and their overcoming"

Chris Joseph Customer and Consumer Definitions. <http://smallbusiness.chron.com/customer-consumer-definitions-5048.html>

Fisher, I. 1928. *The Money Illusion*, New York: Adelphi Company.

Hayrapetyan, D. 2012. Factors of reduction of money illusion. Пятая международная конференция по когнитивной науке: Тезисы докладов: В 2 т. Калининград, 18–24 июня 2012 г.— Калининград. Т. 1: — стр 64–65.

Hayrapetyan D. 2012. The psychometric parameters of technique of psychodiagnostic of money illusion. Bulletin of Yerevan University, 2012. N 137.4, Yerevan, pp.55–64.

VERBAL FACEBOOK POSTINGS — DISTRIBUTED LANGUAGE AND COGNITION

O.A. Karamalak

olgakaramalak@yandex.ru

Nosov Magnitogorsk State Technical University (Magnitogorsk, Russia)

Cognitive aspects of communication in the Internet space and Internet discourse have lately become important to the development of contemporary linguistics in the electronic media that have given rise to new types of communication and new kinds of cognitive systems. With the formation of a new cyberontology, we see the appearance of new genres of communication, the rise of new methods of linguistic analysis, and the broadening of pragmatics. The paper will examine the verbal aspect of Internet statuses on Facebook by taking a perspective based in the study of distributed consciousness and language. On this view, it represents a special type of discourse of “everyday life” whose main function is in co-orienting people. The study is held from the perspective of psycholinguistics.

Internet updates on Facebook are short, but capacious text messages, graphical, video or sound images that a user places on his or her own and other peoples’ pages that are, from then on, available for comments. In this context the focus falls on personal Facebook postings by American college students who express their worries, problems, interests, feelings and emotions. We view these posts as the realization of “everydayness”.

The approach connected with the concept “everyday life” is a relatively new one in the Humanities. It is formed simultaneously in history, sociology, philosophy in the 70—80s of the XX century. However a serious interest to mundane consciousness appeared much earlier. Heidegger characterizes “everydayness” or “common sense” (Germ. *Altaeglichkeit*) as “scattered self”, “something average”, “dissolving in public”, that is some-

thing impersonal “Das Mann” and commonplace (Heidegger 2003: 62).

Facebook posts are a special type of discourse, or affordances for discourse emergence. Following Gibson’s ecological approach to perception “the affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill” (Gibson 1979: 127), we consider Facebook posts as affordances that can trigger some comments and give rise to discourse.

The intentionality and pragmatic presuppositions of internet postings are of considerable interest. Some are published to meet a bio-psychological desire to share things. Such postings can be defined as situational or locative — they describe physical actions or state of the author such as: drinking, eating, listening to, reading, watching, feeling, etc. Searle, introducing the classification of different acts of speech, speaks about locutionary or utterance acts (Searle 1969).

- 1) “Nope”
“Rejecting the morning hours?”
Yes
- 2) “made tea... but where did I put it? (6 people like it)”
“found it”
“I lost my coffee three times today!”
“You’re too young for misplacing things.”

There appears to be bio-psychological need to “share”, “scatter”, “disperse”, “dispel”, “stray”, “express” different states (psychological, physical, mental). In Maturana’s (1978) terms, this is because, as structurally determined (autopoietic) systems, we strive for “openness” to overcome closure and “disperse” through other people; we strive to go beyond our boundaries and mount the “aloofness of human consciousness”. “On this view, the mind has no locus but, rather, it is an activity of the living being which integrates at any moment the ongoing re-