



ISSN 2080-1807

TORUŃSKIE STUDIA BIBLIOLOGICZNE
2016, nr 1 (16)

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Trends in Reading Research

DOI: <http://dx.doi.org/10.12775/TSB.2016.008>

ABSTRACT: The paper analyses reading research trends in Lithuania (1990–2004) based on main research directions listed in Action 1404 E-READ of an international research organization COST. Digital technologies are replacing paper media at an increasing pace, which affects the reading process. The research directions defined by COST represent this trend. These directions are compared with main trends in reading research, done in Lithuania. The purpose of the paper is to analyse reading research trends of Lithuanian and international researchers during the last decade. Information for this research was gathered using National bibliography database, database “Lituanistika”, Lithuanian academic digital library E-LAB, Google search engine, information on COST (Cooperation between Science and Technology) Action 1404 E-READ webpage and internal network. Metadata was structured by showing the main themes. The bibliographic information was analyzed using theoretical abstraction method, which is used to define the structure and position of the object studied. Theoretical description of reading was developed using deductive and inductive analysis methods of the scientific publication content. It allowed to distinguish and compare main trends in reading research. The paper further presents summarized information about reading research in Lithuania.

KEYWORDS: COST Action 1404, reading, reading devices, reading habits, reading research, reading research in Lithuania.

Introduction

Reading is one of mundane continuous processes we do not notice. We just read. Having learned communication symbols (the alphabet) in childhood, we use them automatically. We put emphasis on the content, which we learn via interpreting letters, words, their combinations, and context.

Reading is more frequently and methodically thought about by people, who deal with a skill acquisition process. They could be teachers, who teach others to read, professionals, who encourage reading (e.g. library or other cultural institution staff), professionals for whom reading is a source of income (e.g. publishers, editors, advertising professionals), people, who use reading as a part of creative work (writers). Reading and paper media (books, newspapers, magazines, etc.) have been closely associated in the minds of the public for a long time. The situation is changing radically in modern societies. Research by Anne Mangen et al.¹, Christopher C. Davoli², Anne Mangen and Jean-LucValey³ shows that as media usage habits change intensively, people tend to read texts printed on paper less and less. They turn to digital media. Does this influence a change in reading process? If it does, how exactly? Researchers are looking for answers to these questions. This paper seeks to analyze further what reading research directions are identified in Lithuania and abroad, and how do they reflect media usage changes in the society.

The purpose of the paper is to analyse reading research trends of Lithuanian and international researchers during the last decades (1990–2014). Information for this research was gathered using the national

¹ A. Mangen, B. Walgermo, K. Bronnick, *Reading Linear Texts on Paper versus Computer Screen: Effects on Reading Comprehension*, "International Journal of Educational Research" 2013, no. 58, pp. 61–68.

² Ch. C. Davoli, *When Meaning Matters, Look But Don't Touch: The Effects of Posture on Reading*, "Memory and Cognition" 2010, no. 38 (5), pp. 555–562.

³ A. Mangen, J.-L. Velej, *Cognitive Implications of New Media*. In: *The Johns Hopkins Guide to Digital Media*, Baltimore 2014, pp. 72–77.

bibliography database, the “Lituanistika” database, the Lithuanian academic digital library E-LAB, the Google search engine, information at the COST (Cooperation between Science and Technology) Action 1404 E-READ webpage and internal network (internal scientists network information used scientists by e-mails, direct conversations during meetings). Metadata was structured to show the main themes. The bibliographic information was analyzed using theoretical abstraction method, which is used to define the structure and position of the object studied. Theoretical description of reading was developed using deductive and inductive analysis methods of the scientific publication content. It allowed to distinguish and compare main trends in reading research. Objectives:

1. Define reading by connecting it to communication in the reading process, and the role of reading in developed society.
2. Define main international reading research directions (using COST Action 1404 programme).
3. Analyze reading research directions in Lithuania (period of 1990–2014).
4. Compare the findings and indicate topics for further reading research.

Definitions of the reading process

Reading is one of the main tools for socialization. It is a continuous process, which is why many people simply do not notice it. We usually learn to read in childhood. It is a skill necessary for further personal development; after it is mastered, one can focus on content received via reading without having to worry about the process itself. We usually stop to think about reading until confronted with someone who is currently learning to read. How do we teach them more effectively? Is it enough to teach the letters? Or are other skills necessary to help move along towards understanding information in the text faster? These questions are always relevant to teachers. Relevance of reading is very noticeable now as media usage habits are changing in the society. Maybe future generations do not need to learn to read, recognize letters and use this skill as a base for further exploration of the world. Maybe it is enough to look at visual data in the



media and absorb the information this way? What would we lose if we abandoned reading? These topics are discussed by scientists in many fields: pedagogy, sociology, philosophy, literature studies, communication, etc. Reading certainly requires an interdisciplinary approach.

Reading skill development does not end with development of phonetic abilities (recognizing audible letter symbols, being able to understand information as text is read to us and to write it down). Reading skill development does not end with learning to read well, as well as with ability to understand and interpret texts. Modern reading theory states that we develop reading skills throughout our lifetime as we broaden our worldview. We can understand reading as a linear process of learning to recognize symbols (linguistic models) or as an information absorption process (information and communication theories); we can research reading strategies and links between reading and cognitive processes. Reading may also be analysed via motivation, self-actualization, gaining of unique experiences (socio-neurological reading processes, emotion research), etc.⁴

According to Genovaitė Raguotienė:

the magic of reading is as inexplicable as experiences it arouses in us while we read. Reading is a unique and specifically human activity. Humans communicate through printed materials, manuscripts, letters. It is a process of understanding letters and texts, it is a complex activity.⁵

Modern reading theories which use psychoneurological methods and research brain activity during reading are trying to shed scientific light on this magic. Professor Arthur M. Jacobs (Center for Cognitive Neuroscience (CCNB), Freie Universität Berlin) researches brain activity. One of the main research aspect in his lab is neuro-cognitive activity of human brain during reading. According to Jacobs, while reading is a new

⁴ M. I. Kamil, P. P. Afflerbach, P. D. Pearson, E. Moje, *Reading Research in a Changing Era: An Introduction*. In: *Handbook of Reading Research*, vol. 4, ed. by M. I. Kamil, P. D. Pearson, E. Moje, P. P. Afflerbach, New York–London 2011, pp. XIII–XXIV.

⁵ G. Raguotienė,atversta knyga [a Bit about Reading], Vilnius 2008.

process in human evolution, neuro-cognitive research shows that the majority of human brain is active during reading. Neuropsychological research methods have shown that reading is a process during which a human can restore certain brain functions, learn culture, adopt values, feel emotion, etc.⁶

The polysemous nature of the reading process is also reflected in the US scientists' reading research and method list.⁷ It lists these reading research areas: 1) Language and Cognition in Sociocultural Contexts, 2) Foundations for Literacy Development, 3) Comprehension Development In Words to Worlds, 4) Models of Reading and Writing Processes; 5) Literacy's New Horizons: An Emerging Agenda for Tomorrow's Research and Practice.

Research Council of Lithuania in its national science program project, within welfare society section, lists psychological health of the residents. One of the variables in this section – “changing technologies, which affect habitual communication of the residents”⁸, requires attention of the scientists, as its effect is not known yet. Technology development clearly affects reading, which is one of the habitual communication forms.

After summarizing understanding and definitions of the reading process, it becomes clear that reading is understood very broadly, and the research is interdisciplinary in its nature. Reading is analyzed in a sociocultural context, as an aspect of literacy development, as an area of media usage, and/or as processes in human brain (in psychoneurological research). Considering the future, scientists draw our attention to transformations of the literary definition, development of media, used in a society, and related changes in reading processes.

⁶ A. M. Jacobs, *Toward a Neurocognitive Poetics Model of Literary Reading*. In: *Cognitive Cognitive Neuroscience of Natural Language Use*, ed. by R. Willems, Cambridge 2015, pp. 136–159.

⁷ *Theoretical Models and Processes of Reading*, 6th Ed., ed. by D. E. Alvermann, N. J. Unrau, R. B. Ruddell, Newark 2013.

⁸ *Nacionalinės mokslo programos „Gerovės visuomenė“ projektas* [National Science Program Project “Welfare Society”] (2014) [online] [access: May, 31, 2016]. Available at: <http://www.lmt.lt/lt/naujienos/viesas-svarstymas/parengti-nauju-nacionaliniu-heth.html>.

Main reading research directions in COST action E-READ strategy

The “Europe 2020” development strategy requires an educated society which accepts and deals with challenges characteristic to information and knowledge society. Reading is one of the factors in socialization process, which allows societal integration. Standardized international reading research (e.g. PISA 2009, 2012) allow comparison of reading skills among people in different countries and regions. Results show that reading skills are changing - reading is becoming more fragmented. As media used for reading changes from paper to digital, so do reading habits, the behaviour of the readers regarding selection of reading material, and especially text comprehension processes. An international research group has been established in 2014 in order to better examine situations related to the reading process. The group has been initiated by professor Anne Mangen from the National Reading Education and Research Center (Stravanger University). The COST (Cooperation between Science and Technology) international organization has supported the initiative by providing a platform for an international researcher network. Representatives from 22 countries have joined the reading research network in the first stage already. The network is expanding and attracting new members. It is working according to Action 1404 E-READ (Evolution of reading in the age of digitisation). The Action 1404 is listed in an international cooperation section topic “Individuals, society, culture and health”. Research goals are oriented towards understanding the effect of technological changes to human communication process (reading), which makes this topic relevant in welfare society research area, too.

Having analyzed available worldwide reading research, network scientists have distilled main aspects of reading process:

1. Ergonomics (multisensory engagement with a device),
2. Allocation of attentional resources, perceptual processing,
3. Linguistic cognitive process,
4. Phenomenological cognition (as a personally meaningful activity).⁹

⁹ *Memorandum of Understanding for the Implementation of a European Concerted Research Action Designated as COST Action IS11404 Evolution of Reading in the Age of*

Reading research is based on two principal theoretical models of a reading process:

1. Reading is a type of human – technology interaction.
2. Reading is embodied and multisensory.¹⁰

The research network aims to develop and verify various hypotheses about the effect of digitizing on reading. Various dimensions are used in the analysis. They join neuropsychological, historical, humanities and arts paradigms in an effort to understand how digitization affects emotional satisfaction and information and learning aspects of the reading process.

The researchers have divided into four working groups according to their research interests. The four groups represent principal reading evolution research directions:

1. **Continuing / skilled (PISA-age) reading.** Researchers in this group seek to analyse the skills of youth and seniors in using various reading devices (printed books, e-readers, tablets, etc) and related differences in understanding text and absorbing information.¹¹
2. **Developmental aspects of reading.** Researchers of this group¹² are interested in effect of reading devices on deep reading. Deep reading is a form of reading based on focus on the text not by reading its grammatical forms, but by emphatically understanding the meaning behind it. Such reading relies on well-developed primary reading skills; the use of deep reading requires deeper motivation, more time and attention. Teaching programmes are moved to digital reading devices; reading skills are being separated from handwriting. These processes make teachers question whether children will be able to develop deep reading skills and how such changes will affect the future. Research

Digitisation (E-READ) [online]. Brussels: European Cooperation in the Field of Scientific and Technical Research – COST, 2014, 24 pp. [access: May, 31, 2016]. Available at: http://w3.cost.eu/fileadmin/domain_files/ISCH/Action_IS1404/mou/IS1404-e.pdf, p. 10.

¹⁰ Ibid., p. 11.

¹¹ Ibid., p. 12.

¹² A. Mangen, B. R. Walgermo, K. Bronnick, Kolbjorn, op.cit.

plans to compare development of deep reading skills while using different reading devices.¹³

3. **Experiential and emotional aspects of reading.** Empirical research showed that due to well developed deep reading skills a person can feel unique personal experiences and emotions. This develops empathy, social adaptation, emotional self-regulation, interpersonal communication, and general intellectual prowess.¹⁴ Because use of digital devices for reading affects deep reading, researchers seek to compare how and if the same texts (but accessed via different devices: printed books, e-readers, computer screens) affect emotions of the reader.¹⁵
4. **The ergonomics of reading (physiology, haptic and tactile feedback). Reading is usually understood and analyzed as a cognitive process.** Sometimes eye or head movement analysis is used. The researchers in this group focus on how the entire human body participates in the process of reading: hands that hold the reading device, fingers that feel (paper or a screen).¹⁶ Position of the body is also important – regarding seeing better, understanding better, holding attention longer, keeping the body in a proper position, etc.¹⁷

COST network Action 1404 research groups represent principal reading research aspects, focusing on changes caused by developing technologies.

Reading research directions in Lithuania

The paper further presents summarized information about reading research in Lithuania. Detailed search of information sources listed in methodology section by keywords “reading and research” revealed the following:

¹³ *Memorandum...*, p. 12–13.

¹⁴ A. M. Jacobs, M. Arthur, op. cit.

¹⁵ *Memorandum...*, p. 13–14.

¹⁶ S. Benedetto, V. Drai-Zerbib, M. Pedrotti [et al.], *E-Readers and Visual Fatigue*. “PLOS ONE” [online] 2013, vol 8, iss. 12 [access: May, 31, 2016]. Available at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0083676>.

¹⁷ *Memorandum...*, p. 14–15.

- 137 publications were found for the relevant time period in digital databases.
- Analysis of annotations identified 48 articles with reading as the main topic, or main topic closely related to reading. These publications were further analyzed to divide them into thematic areas of research.
- 9 publications were identified using google.lt search engine. These publications are journalistic research, information regarding accomplished reading research, and official documents regarding programs encouraging to read.

The following reading research thematic areas were identified by analyzing the publications:

- **Actions to encourage reading** and related research. This kind of research is mostly performed by libraries and information (communication and librarianship) area scientists. The research is about reading repertoire by different age groups, reader types, text types, reading needs, reading culture, etc.¹⁸

¹⁸ *Jaunimo skaitymo psichologiniai ypatumai* [Psychological Peculiarities of Youth Reading: Research Anthology], ed. by V. Rimša [et al.], Vilnius 1992; V. Cicėnienė. *Periodinių leidinių paplitimas ir skaitymas: tyrimo rezultatai* [Reach and Reading of Periodicals: Results of the Study], ed. by V. Rimša, Vilnius 1998; *Skaitymas, skaitytojas, bibliotekininkas: bibliotekininkystės mokslo darbai* [Reading, Reader, Librarian: Librarianship Research], ed. by V. Rimša, Vilnius 1997; V. Rimša, *Visuomenės skaitymo interesų ir jų tenkinimo būklės tyrimai bibliotekose* [Survey of the Level of Society's Reading Interest Satisfaction Levels in Libraries]. In: *Biblioteka ir skaitytojas*, Vilnius 2001, pp. 42–65; V. Mozūraitė, *Kodėl ir kaip skaito vaikai* [Why and What Do Children Read], "Gimtas Žodis" 2000, no. 6, pp. 22–29, 46; "Gimtas Žodis" 2000, no. 7, pp. 22–25, 47; A. Krakytė, *Senojo Vilniaus universiteto akademinės bendruomenės skaitybos tyrimai: istoriografijos aspektai* [Reading Research of the Old Vilnius University Academic Community: Historiography Aspects], "Knygotyra" 2006, no. 46, pp. 118–137; E. Macevičiūtė, *Information Needs Research in Russia and Lithuania, 1965–2003*, "Information Research" 2006, vol. 11, no. 3, p. R256; L. Krauls, *Methodological Aspects of Research in Culture of Reading: Pedagogical Paradigm in the Lithuanian Library Science Since 1918: Summary of Doctoral Dissertation: Humanities, Communication and Information (06 H)*, Vilnius 2009; A. Lapienienė, G. Merkys, *Vaikų kultūrinio kapitalo skirtumai urbanizuotose ir neurbanizuotose Lietuvos vietovėse* [Differences in Child Cultural Capital Among Urbanized and Non-Urbanized Areas of Lithuania], "Ekonomika ir Vadyba: Aktualijos ir Perspektyvos" 2009, no. 3 (16), pp. 221–228.

- **Reading pedagogy.** This research is performed by pedagogues; it is aimed at analysis of educational processes, development of specific or common social skills.¹⁹
- **Reading and interpretation of literary fiction.** This is an area of literary critics, philosophers, art critics. They focus on text, interpretation of meaning, search of context, broadening of one's worldview, contemplation of the thought of the author.²⁰

¹⁹ D. Jakavonytė-Staškuvienė, *Textlesen als Grund für Bildung der Kommunikativen Kompetenz der Grundschüler: Zusammenfassung der Doktordissertation: Sozialwissenschaften, Erziehungswissenschaft (07 S), Pädagogik und Didaktik (S 270)* [Text Reading as a Basis of Communication Competence Development in Primary School Pupils], Klaipėda 2009; D. Jakavonytė-Staškuvienė, *Pradinių klasių mokinių negrožinio teksto supratimo gebėjimų ugdymas analizuojant lietuvių nacionalinių parkų aprašymus* [Development of Non-Fiction Understanding Skills Among Primary School Pupils While Analysing Descriptions of Lithuanian National Parks], "Pasaulis Vaikui: Ugdymo Realijos ir Perspektyvos" 2011, part 4, pp. 243–259; D. Kalesnikienė, *Theoretical and Empirical Substantiation of Diagnostics of the Fourth Formers' Understanding of the Read Text: Summary of Doctoral Dissertation: Social Sciences, Educational Science (07S)*, Vilnius 2007; V. Salienė, *Negrožinio teksto supratimo mokymas pagrindinėje mokykloje: kaip įgyvendinti programos reikalavimus ugdymo procese?* [Teaching to Understand Non-Fiction in Primary School: How To Implement Program Requirements in the Teaching Process?], "Žmogus ir Žodis" 2010, vol. 12, no. 1, pp. 150–157; J. Bukantienė, D. Intaitė, *Ugdymoji sąveika neformaliojo vaikų skaitymo kontekste* [Educational Relationship in the Context of Non-Formal Child Reading]. In: *XX nacionalinė konferencija "Vaclovo Biržiškos skaitymai: bibliotekininkystės ir informacijos mokslai"* [20th National Conference "Readings of Vaclovas Biržiška: Librarianship and Information Sciences"], Vilnius 2009, pp. 32–40; D. Čiočytė, *Antano Baranausko Anykščių šilelis: gėrėjimosi ir nevilties oksimoras* ["Anykščių šilelis" by Antanas Baranauskas: Oxymoron of Awe and Despair]. In: *XX amžiaus literatūros teorijos: konceptualioji kritika*, ed by A. Jurgutienė, Vilnius 2010, pp. 86–91; V. Indrašienė, E. Kapočiūtė, *Skaitymo strategijų taikymo socialinio pedagogo darbe, sprendžiant paauglių socialines ir pedagogines problemas, prielaidos* [Assumptions of Using Reading Strategies in Social Pedagogue's Work with Teenage Social and Pedagogical Problems], "Pedagogika" 2008, vol. 91, pp. 87–94; V. Škudienė, *Comparison of Reading Models, Their Application to the Classroom and Their Impact on Comprehension*, "Kalbų Studijos" 2002, no. 2, pp. 94–99; R. Milerienė, *Teksto supratimo gebėjimų ugdymas ir skaitymo motyvacijos stiprinimas mokant(is) metakognityvinių skaitymo strategijų heterogeninėje klasėje: daktaro disertacija* [Development of Text Comprehension Skills and Strengthening of Motivation to Read While Teaching Metacognitive Reading Strategies in a Heterogeneous Group: Dissertation], Vilnius 2008.

²⁰ R. Pociūtė, *Broniaus Radzevičiaus romano "Priešaušrio vieškeliai" skaitymas psichoanalizės kontekste* [Reading of Bronius Radzevičius Novel "Roads of Pre-Dawn" in Contexts of Psychoanalysis]. In: *XX amžiaus literatūros teorijos: konceptualioji kritika...*, pp. 205–251; R. Šilbajoris, *Teorių ir teksto sąveikos laukuose: skaitymo poetika* [Relationship of Theory and Text: Poetry of Reading]. In: *XX amžiaus literatūros teorijos: konceptualioji kritika...*,

- **Reading and psychological processes.** This area focuses on the relationship between reading and psychological processes – motivation, assumptions, self-help via reading texts, emotional responses while reading, etc.²¹

Some studies did not fit into these areas, but they have the potential to start new directions of research. Vytautas Šernas analyzes methods of

pp. 92–116; S. Valentas, *Alfabetas poezijoje ir alfabeto poezija Vlado Braziūno ir Sigito Gedos (per)skaitymas* [Alphabet in Poetry and Poetry of an Alphabet by Vladas Braziūnas and Sigitas Geda], *Acta Humanitarica Universitatis Saulensis* 2007, vol. 3, pp. 154–168; A. Jurgutienė, *Fenomenologinis teksto interpretavimas* [The Phenomenological Text Interpretation], *„Teksto Slėpiniai“* 2005, no. 8, pp. 5–25; A. Jurgutienė, *Fenomenologinis, hermeneutinis ir recepcinis teksto interpretavimas* [Phenomenological, Hermeneutical, and Receptional Text Interpretation]. In: *XX amžiaus literatūros teorijos*, Vilnius 2006, p. 17–62; G. Šmitienė, *Eilėraščių skaitymas* [Reading Poems], *„Žmogus ir Žodis“* 2006, vol. 8, no. 4, pp. 51–59; J. Jonutytė, *Skaitymo fenomenologija, arba kaip Džefersonas tapo Telšiais, o Telšiai–Džefersonu* [Phenomenology of Reading, or How Jefferson Became Telšiai and Telšiai–Jefferson]. In: *Sambalsiai: studijos, esė, pokalbis*, Vilnius 2005, pp. 134–144; D. Satkauskytė, *Tarp teksto ir konteksto: sociokritika kaip kompromisas* [Between Text and Context: Social Critics as Compromise], *„Colloquia“* 2013, no. 31, pp. 13–29; A. Gajauskas, *Fenomenologinė Algio Mickūno kultūros filosofija: disertacija* [Philosophy of Phenomenological Culture in Works of Algis Mickūnas: Dissertation], Vilnius 2011; V. Daujotytė, *Kalba ir jos menas: filologiniai tyrimai ir patyrimai* [Language and the Art of It: Research and Experiences in Philology], Vilnius, 2009; R. Sirvydė, *Džiaugsmo metonimijos: kur dingio šypsena* [Metonymies of Joy: The Absence of Smile], *„Filologija“* 2011, no. 16, pp. 61–68.

²¹ J. Sučylaitė, *Laimės žiburio sielai ir kūnui beieškant* [Looking for a Light of Happiness Torch for the Body and Soul], *„Teksto Slėpiniai“* 2009, no. 12, pp. 43–56; R. Gedutienė, M. Rugevičius, *Effects of Emerging Literacy Skills on the Development of First-Grade Reading and Writing*, *„Spring University. Changing Education in a Changing Society“* 2005, no. 1, pp. 62–67; D. Janavičienė, *Biblioterapija bibliotekose: metodikų analizė* [Bibliotherapy in Libraries: Analysis of Methodologies]. In: *XX nacionalinė konferencija „Vaclovo Biržiškos skaitymai“*..., pp. 43–50; D. Janavičienė, *Biblioterapijos, skaitymo ir gyvenimo kokybės sąsajos: tarpdisciplinarinis požiūris* [Relationship between Bibliotherapy, Reading, and Quality of Life: an Interdisciplinary Approach], *„Knygotyra“* 2005, vol. 44, pp. 230–238; R. Melienė, J. Ruškus, *Skaitymo motyvacijos diagnostika: testo patikimumo įvertinimas* [Diagnostics of Reading Motivation: Evaluation of Test Reliability], *„Specialusis Ugdymas“* 2005, no. 1 (12), pp. 61–73; V. Lamanaukas, R. Bilbokaitė, J. Gedrovics, *Lithuanian and Latvian Students' Attitude Towards Science Teaching/Learning Methods: Comparative Analysis*, *„Problems of Education in the 21st Century“* 2010, vol. 19, pp. 55–62; D. Vaitiekūnas, *Liūdesio recepcija (Jono Biliūno prozos interpretacija)* [The Reception of Sadness (An Interpretation of Jonas Biliūnas' Prose)], *„Teksto Slėpiniai“* 2006, no. 9, pp. 31–41; E. Klimaitė-Keturakienė, *Mitologinio mąstymo principai ir archetipinės vaizdinių reklamų struktūros* [Principles of Mythological Thinking and Archetypal Structures in Images Advertisement]. In: *Viešojo diskurso retorika ir lingvistika*, Vilnius 2008, pp. 90–110.

reading.²² Artūras Gudiniavičius analyzes quality parameters of a digital book from user perspective in his dissertation.²³

In recent years, a significant part of reading studies has been carried out as commissioned by thoughtfully composed working groups, both nationally and internationally. For example, using PISA (Programme for International Student Assessment, <http://www.oecd.org/pisa/about-pisa/>) or PIRLS (Progress in International Reading Literacy Study, <http://timssandpirls.bc.edu/methodology>). These studies are presented here as a separate area, although according to subject they correlate with research directions listed above.

Organisation for Economic Cooperation and Development (OECD) is conducting an international survey on fifteen year-olds (Programme for International Student Assessment –PISA), which helps to assess the level of pupils' knowledge and skills, necessary for full participation in society, at the end of compulsory education. The study is carried out on a continuous basis. Lithuania has participated in the survey several times. Survey reports and analysis of Lithuanian data are used not only by scientists. The results are widely publicized in the media. An important finding is that research results show that students, who demonstrated better reading skills, also demonstrated better achievements in other fields. In this way better reading skills help to achieve better results in mathematics and natural sciences.²⁴

Another research was done according to an international methodology of PIRLS center in Boston (USA)²⁵; it covers a wide array of reading theories and analysis of Lithuanian statistical data.

²² V. Šernas, *Racionalaus tyliojo skaitymo kompetencija ir sintezuotas jos ugdymas* [Development of Rational Silent Reading Competency], "Santalka" 2006, vol. 14, no. 2, pp. 54–65.

²³ A. Gudiniavičius, *Skaitmeninės knygos kokybė vartotojo požiūriu* [Quality of a Digital Book from User Perspective: Dissertation], Vilnius 2012.

²⁴ J. Dudaitė, *Tarptautinis penkiolikmečių tyrimas* [Programme for International Student Assessment: OECD PISA 2009], Vilnius 2010; *Tarptautinis penkiolikmečių tyrimas* [Programme for International Student Assessment: OECD PISA 2012 report], Vilnius 2013.

²⁵ A. Elijo, *Tarptautinio skaitymo gebėjimų tyrimo ataskaita* [Progress in International Reading Literacy Study: PIRLS 2006], Vilnius 2007; G. Merkys [et al.], *Mokslinio tyrimo "IEA PIRLS 2006 antrinė duomenų analizė" ataskaita* [Quality of a Digital Book from User Perspective] [online] [access: May, 31, 2016]. Available at: https://www.smm.lt/uploads/lawacts/docs/624_43d66586657dc4f4c8238bfe10eefc23.pdf.

Another work of the researcher group is directly related to the national reading program. The Government of the Republic of Lithuania has approved a program for reading promotion on November 30, 2006. The purpose of the program is to promote reading among all age and social groups, improve their reading skills, as well as raise the prestige of reading. The program is implemented by the Ministry of Culture and the Ministry of Education. The Lithuanian National Martynas Mažvydas Library was entrusted to carry the program out. As a part of this program researchers have carried out a representative study of the Lithuanians' situation with regards to reading volume, repertoire, and intensity.²⁶ The conceptual framework of reading promotion was created.²⁷

The Lithuanian Ministry of Culture has financed a survey on reading habits of adults. It was conducted within a project titled „Find the time to read a book”. The survey clarified public attitude towards reading, identified reading habits of adults, reasons for reading or not reading books. According to its theme, this survey fits under reading promotion activities. A couple of journal articles devoted to reading analysis were identified in Lithuanian media. They were devoted to reading repertoire, linking reading tastes to business aspirations of publishers²⁸, thoughts about the influence of reading on critical thinking²⁹, warnings of possible consequences of not reading.³⁰ All articles mentioned in this paragraph were published in the “Veidas” journal [eng. *Face*].

²⁶ T. Tamošiūnas [et al.], *Skaitymo mastas, kryptingumas ir poreikiai* [Reading: Scale, Direction, and Needs] [online] [access: May, 31, 2016]. Available at: http://www3.lrs.lt/pls/inter/w5_show?p_r=440&p_k=1.

²⁷ *Skaitymo skatinimo koncepcija* [SEIMAS 2012–2016] [online] [access: May, 31, 2016]. Available at: http://www3.lrs.lt/pls/inter/w5_show?p_r=440&p_d=77043&p_k=1.

²⁸ V. Sapetkaitė, *Lietuvių skaitymo yp atumai* [Reading Peculiarities of Lithuanian], “Veidas” 2015, no. 14, pp. 70–71 (journalistic investigation).

²⁹ K. Kanišauskaitė-Šaltmerė, *Mažėjančio skaitymo grimasos arba kaip netapti patiklia ir blaivaus mąstymo stokojančia tauta* [Scary Faces of Reading Decline or How Not To Become a Naive and Dim-Witted Nation], “Veidas” 2014, no. 6, pp. 44–46 (journalistic investigation).

³⁰ G. Serafinas, *Liūdnos neskaitymo pasekmės* [Sad Consequences of Not Reading], “Veidas” 2013, no. 11 p. 4; V. Stoškuvienė, *Auga antra lietuvių karta, neskaitanti knygų* [Second Generation on Lithuanian, Who Do Not Read Books], “Veidas” 2011, no. 35, pp. 44–45.

Analysis of results

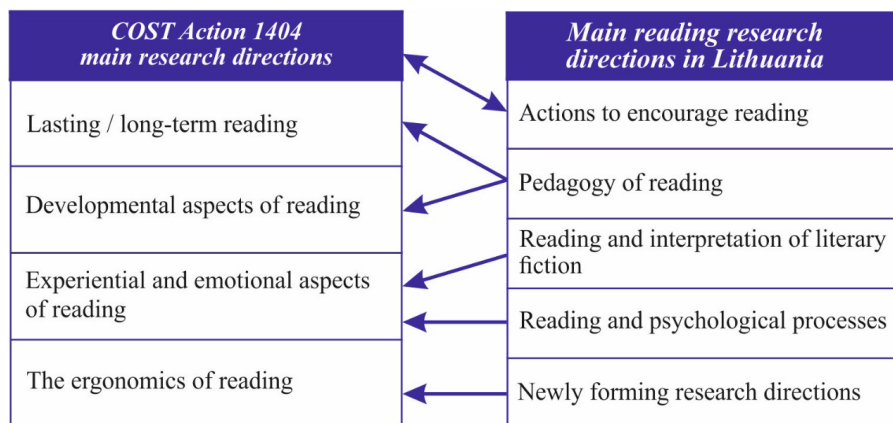


Figure 1. Comparison of main reading research areas in Lithuania and abroad (according to COST Action 1404)

Source: own research.

Reading promotion activities have a long tradition in Lithuania. This area to do research in is not listed as a separate thematic area in COST Action 1404. The Action regards promotion of reading as one of the objectives of interest groups, which would receive the results of the research. Reading pedagogy is analysed via two key aspects: regarding the recommendations of international PISA literacy research framework and analysis of influence of digital reading devices on deep reading. Lithuanian researchers mainly focus on educational process.

A large part of reading research in Lithuania focuses on literary works and their interpretation. This topic would fit into area of “emotional and experiential aspects of reading”, but foreign authors use a much wider range of research methods, they connect their research to neuropsychology, social psychology, new media and other modern scientific theories.

Lithuanian reading research topic dedicated to relationship between reading and psychological processes fits into previously mentioned area of “emotional and experiential aspects of reading”. In Lithuania, these

studies are more directed towards specific reading activities, special education, or implementation of self-help or creative methods.

Other research in Lithuania should be applied to the area of “ergonomics of reading”. The following tendencies were identified from data collected on reading research in Lithuania:

1. Reading research is not very common in Lithuania – during the period of independence (1990–2014) only 137 reading-related scientific publications were published (5,48 publications per year). Publications where reading is the direct examination subject or a close reading-related subject were only 48 in 25 years, so not full 2 publications per year.
2. In the first decade of the twenty-first century Lithuania has joined international reading research programs, and increased number of commissioned reading research. However, research teams in commissioned studies, with few exceptions, do not include scientists who have previously participated in reading research.
3. Information that is widely available to the public in media does not reflect the whole spectrum of scientific research. Journalistic investigation about reading was found in only one source. Information about projects related to reading and official documents are publicly available on project websites.
4. Research for reading promotion programs (reading repertoire, scope, needs, etc.) comprises a significant part of all reading research in Lithuania. It is not noted as a separate area of research in COST network. However, the reading promotion is formulated as a general research objective – to encourage a broader understanding of reading, to present research results to institutions that promote reading.
5. All the identified key research topics fit into COST developed areas, but not quite meet them. Literary analysis in Lithuania stands out as a separate thematic group, but in the international network it is included under experiential and emotional aspects of reading.
6. Only two studies were identified as potentially starting new research direction in Lithuania, namely “ergonomic aspects of reading” in the E-READ network.



7. Lithuanian reading research gives too little attention to changing reading habits, media transformations, human – computer interaction. It is therefore desirable to expand this area of research, especially noting the influence of technological change in human communication process (reading) in the context of the welfare society.

Synthesis of results

Multidisciplinary nature of reading is reflected in the variety of research dedicated to it. Information analyzed here substantiates a wide array of reading research possibilities. New questions arise while we are looking for answers to questions already posed. Reading research gains new meaning in a modern society based on information technology. This research becomes analysis of effects technological change has on a person, his/her welfare, especially on interpersonal communication and its new forms. Reading is also changing as one of the forms of communication and world exploration. Having overviewed reading research performed in Lithuania during independence period, we can see that we do not have enough research that focuses on effects of changes in media and new technologies. All of the research areas discussed lack analysis of relationship between new digital reading devices and reading process.

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Trends in Reading Research [Trendy w badaniach czytelnictwa]

ABSTRACT: Artykuł dotyczy trendów czytelnictwa na Litwie w latach 1990–2014 w kontekście głównych zmian wynikających z wprowadzania nowoczesnych technologii (wymiana nośników papierowych na cyfrowe), a wskazywanych w działaniu COST Action 1404 (Europejski Program Współpracy Naukowo-Technicznej). Celem artykułu jest analiza trendów badawczych w zakresie czytelnictwa.

stwa litewskich i zagranicznych naukowców w ciągu ostatniej dekady. Podstawą badań stały się dane pochodzące z elektronicznej bibliografii narodowej, bazy „Lituanistika”, litewskiej akademickiej Biblioteki Cyfrowej e-LAB, wyszukiwarki Google oraz wewnętrznych stron WWW sieci COST. Zebrany materiał poddano analizie za pomocą metod teoretycznej abstrakcji, metod dedukcyjnych i indukcyjnych, co pozwoliło poznać i nakreślić główne trendy w zakresie badań czytelnictwa oraz odnieść je dodatkowo do poziomu czytelnictwa na Litwie.

SŁOWA KLUCZOWE: badania czytelnictwa, COST Action 1404, czytelnictwo, Europejski Program Współpracy Naukowo-Technicznej (COST), poziom czytelnictwa na Litwie.

