FROM CLOSE TO DISTANT READING OF 100 ROMANIAN NOVELS FROM 1850 TO 1920

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ABSTRACT. *From Close to Distant Reading of 100 Romanian Novels from 1850 to 1920*. In Romania, among the academic personalities, Solomon Marcus (b. the 1st of March 1925, Bacău – d. the 17th of March 2016, Bucharest) was perhaps the only one who happily combined linguistics and mathematics, being known in the Romanian philological environment especially for *Lingvistica matematică [Mathematical Linguistic]*, *Modele matematice în lingvistică [Mathematical Models in Linguistics]*, 1963, 1966, and *Poetica matematică [Mathematical Poetics]*, in 1970, and in the international scientific field for numerous translation and also for numerous papers published in prestigious publishing houses in Paris, New York and Bologna.

Grounded in the Distant reading paradigm (i.e. using digital humanities in analyzing large collection of literary texts) the paper, *From close and to distant reading of Romanian novels from 1850 to 1920* provides a historical classification of texts in order to be included in a multilingual European Literary text Collection (ELTeC), permitting to test methods and compare results across national traditions and consider the consequences of such resources and methods for rethinking fundamental concepts in literary history. The paper is following main ideas in relation with the consequences of an absent research field in Romanian academic studies, *digital humanities*: Close and distant reading in digital humanities: Romanian literature case from 1850 to 1920; Romanian literary history and ways of transnational knowledge through Distant Reading of literary facts: 100 Romanian novels from 1850 to 1920; Transnational redefinition of periods in national history through a literary species: the novel; The problem of "translation / export" of national literary histories.

Key words: Romanian literary history, European literary history, mathematical linguistics, digital humanities, Solomon Marcus, Franco Moretti, distant reading, close reading.

REZUMAT. *De la lectura clasică la lectura la distanță a celor 100 de romane românești din perioada 1850-1920*. Printre personalitățile academice din România, Solomon Marcus (1 martie 1925, Bacău – 17 martie 2016, București) a

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fost probabil singurul care a combinat în mod inspirat lingvistica şi matematica, fiind cunoscut în mediul filologic românesc în special pentru *Lingvistica matematică/ Mathematical Linguistic*, (titlu tradus), *Modele matematice în lingvistică/ Mathematical Models in Linguistics*, (titlu tradus) 1963, 1966 şi *Poetica matematică / Mathematical Poetics*, (titlu tradus) în 1970 şi în domeniul ştiinţific internaţional pentru numeroase traduceri, lucrări publicate la edituri de prestigiu din Paris, New York şi Bologna.

Bazat pe conceptul de lectură la distanţă (adică utilizarea umanioarelor digitale în analizarea unei vaste colecţii de texte literare), lucrarea *De la lectura clasică şi la lectură la distanţă a romanului românesc din perioada 1850-1920* oferă o sinteză istorică asupra textelor incluse în colecţia multi-lingvistică de romane din literatură europeană (ELTeC), care permite testarea metodelor şi compararea rezultatelor în cadrul tradiţiilor naţionale şi luarea în considerare a consecinţelor unor astfel de resurse şi metode de regândire a conceptelor fundamentale în istoria literară. Lucrarea urmează ideile principale referitoare la consecinţele unui domeniu de cercetare absent în studiile universitare româneşti, umaniste digitale: Lectură strânsă şi îndepărtată în domeniul ştiinţelor digitale: cazul literaturii româneşti din anii 1850 până în 1920; Istoria literaturii române şi modalităţi de cunoaştere transnaţională prin lectura la distanţă: 100 de romane româneşti din perioada 1850-1920; Redefinirea transnaţională a perioadelor din istoria naţională printr-o specie literară: romanul; Problema „traducerii/ exportului" istoriilor literare naţionale.

Cuvinte cheie: *Istorie literară românească, istorie literară europeană, lingvistică matematică, umanioare digitale, Solomon Marcus, Franco Moretti, lectură la distanţă, lectură clasică.*

I. Introduction: For a Book that Reads the Reader

It is said that a true book is not the one we read, but the book that reads the reader. In the contemporary world, international terms such as close reading, hyper reading, social reading, distant reading, historical contextualization, surface reading have been associated with this reading habit. And that's because the media in which we read literature in the digital age have been diversified, whether they are printed books, e-readers, tablets, phones, computers, or smartphones, which has generated strong points and weaknesses in different reading strategies. A method of literary study in the Western world remains the close reading. In 1920, literary critic I.A. Richards made an experiment with his students and asked them to interpret poems without giving them any information about the author, the context of the publication, the literary current of the period, the title of the poem. The students failed in this experiment, and I. Richards realized that this ability to interpret a literary text without any contextual information was very useful and called it *close reading*, attempting to develop it in isolation from all other

reading skills. This ability or specific method presupposes, just like historical contextualization, a leading place in the work of the humanities scholars, being intertwined with the historical contextualization method. In his book *Practical Criticism*, I. A. Richards invites the readers to give supreme attention to the word printed on that page and "to do justice" in this way to the text itself.

Cleanth Brooks, Robert Penn Warren, Allan Tate, and John Crowe Ransom, (i.e. New Critics) who debuted in the 1930s and who literally dominated literary life up to the 1950s and 1960s, considered *close reading* a particular, precise identification of all semantic and syntactic subtleties of the literary text, segregating it and cultivating it separately. For them, literary texts have no social or psychological function, and in their opinion they neither educate, nor make the world a better place. They carry their own literary value which, at one point, is exactly like a human being. The comparison with the human being is correct in the context in which the human being lives in isolation, eventually in an experimental laboratory environment. In the opinion of these critics, the reader should not look at the author's opinion, his biography or the political and historical social context. *Close readers* must deliberately ignore all historical, social, political, and biographical contexts to focus only on the text. *Close readers* only work on the literary text, paying close attention to words on the page. *Close reading* is a very precise form of reading that seeks the subtleties of literary forms, the supports and structures that build a novel, a dramatic text or a lyrical text.

In the contemporary age, this New Critics is considered formalistic, an-historical, and apolitical by New Historicists who are discussing in direct opposition to the previous generation called New Critics and are of the opinion that this method is no longer a crucial one.

Close reading has the merit of letting the reader focus on words or phrase and explore the meanings. Sometimes, however, this microscopic analysis of words and meanings is useless and complicated, forced and unrelated to the rest of the text. Sometimes the reader who analyzed the meaning which is a dissection of the text, is also aware of contexts and biographical details, but these aspects are circumvented by the final analysis, evoking the meaning. The *close reader* enlarges the details of the text it submits to a zoom and "does not see the forest but the trees" because it sees the tree very close to the microscope. Naturally, the text counts for the reader and the reader must always return to the text.

The Romanian literature evolved in other conditions, and instead of this theoretical stage of reading had debates on the modernity of literature in the writing of literary history. Eugen Lovinescu and George Călinescu are the ones who draw the coordinates of the modernity of Romanian literary history, overcoming for several decades the discussion of the integration of the types of reading.

In the close reading sequence, when computer science encountered literature, Western Europe has developed several basic strategies on daily reading of the online texts. A form of co-operation of online reading is called *social*

reading, a kind of collective reading, different from the one made at the corner of medieval streets, when *Divina Commedia* gains its notoriety. The forms of *historical reading* of literary texts and the historical-literal contextualization constituted an absolutely necessary stage in the evolution of the reading process. The uses and limitations of the concept of *distant reading* formulated with intellectual elegance by Franco Moretti generated new ideas on the use of maps for the "*Atlas of the European Novel 1800-1900"* and offered an academic solution to approach literary texts resulting from the analysis of to the computer of large amounts of data. These new academic approaches to reading do not focus on the interpretation of data, but on surface and material determinations.

This humanistic disguise of computer science and mathematics began from Noam Chomsky's article, *Three models for the description of language*[2], and its book, *Syntactic Structures*[3], detailing the three mathematical models of linguistic description. The ideas of these works have developed differently in the West and in Eastern Europe.

An edifying relating of the evolution of the alliance between humanities and mathematics / informatics in Romania is provided by the academician Solomon Marcus (*Singurătatea matematicianului/ The Loneliness of the Mathematician*), which mentions that the Russian school had proposed an alliance between linguistics and mathematics:

> N. Kolmogorov proposes an algebraic model of the grammatical case, V. A. Uspenski publishes an algebraic model of the speech part, and R. L. Dobrushin proposes an algebraic model of the grammatical category. The first automated translation experiments, which began in the 1940s, were predominantly engineering, but in 1958 O. Kulagina extracted from this type of activity a description of the basic notions of grammar based on crowd theory. The exploring of automatic translation and automated translation capabilities in Western Europe, within Euratom and in the US, for example, through David Hays, leads, towards the end of the 1950s and early 60s, to various ideas of *syntactic projectivity* (Yves Lecerf and others), an interesting challenge for chart theory. In all these activities mathematical logic is essentially involved (Chomsky's generative grammar is essentially a formal system in Hilbert's sense) and some combinatorial chapters (Post systems and problems proposed by Axel Thue at the beginning of the last century). From the logical-mathematical direction come also the linguistic and logical ideas of Y. Bar-Hillel (1953) and J. Lambek (1958). F. Harary and N. Paper propose in 1957 a calculation of the distribution of phonemes, N. Chomsky presents in 1958 an analysis of the relationship between linguistics, logic, psychology and computers; In the same year, Y. Bar-Hillel analyzes the

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[2] Noam Chomsky, "Three models for the description of language", in *I.R.E. Transactions on Information Theory*, vol. IT-2, no. 3, 1956, pp. 113-124.

[3] *Idem*, *Syntactic Structures*, The Hague, Mouton, 1957; Berlin and New York, 1985.

decision-making procedures in natural languages. M. Masterman discusses in 1957 the relationship between semantics and syntax in automatic translation. To all this, we have to add S.C. Kleene's 1956 article on the representation of events in nerve networks and finite automata, in the order of ideas inaugurated by W.S. McCulloch and E. Pitts, in 1943, on a logical computation of the ideas involved in nervous activity[4].

II. Refining the Concept of Reading Novels with the Help of Various Technological Means: Reading Types and Media

The literary critique in the Anglo-Saxon and American space has refined the theorizing of the read/ perusal/ deciphering/ lecture concept under the title *reading*. The novels have remained a kind of loved reading, for today's printed books, computers, laptops, tablets, e-readers, mobile phones, I pads or I phones all these technological reading environments change the way of reception and implicit interpretation of the text of the novels.

In ancient times, it was said that the Egyptian god of the Moon, Thot, the god of Arithmetic, Speech, and the Inventor of Writing had given people this last invention as a mentoring for reading, to make people remember what they are reading. In the last decades, the Western European Space has been very much in discussion:

1. To what extent are these digital environments influencing the reading process and the understanding of texts?

2. If the reader has read a text in different environments, does it mean that he has read different texts?

3. What are the differences between different human brain reactions/ responses when reading text on paper and reading words on screen? Are there rules for preventing errors?

The conclusion is that the screen affects the understanding of the text, diminishing the brain's ability to remember what it reads on the screen and influencing the clarity of the playback of the information[5]. Through the writing speed, using the copy-paste functions, the lecturer breaks the ability of the human brain to understand what he reads and write in his own words what he understands. Copy and paste functions increase write time and reduce brain processing time of information that has already gone, without being understood. The on-line lecturer, which deletes the barriers between texts, between the

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[4] Solomon Marcus, *Singurătatea matematicianului [The Loneliness of the Mathematician]*, Bucureşti, Editura Liternet, 2010, pp. 13-14.

[5] Nicholas Carr, *The Shallows: What the Internet is Doing to Our Brains*, New York, W.W. Norton, 2010. Sven Birkerts, *The Gutenberg Elegies: The Fate of Reading in an Electronic Age*, New York, Fawcett Columbine, 1994. Nicholas Carr, "Is Google Making Us Stupid? What the Internet is Doing to Our Brains", in *The Atlantic Magazine*, 2008. N. Katherine Hayles, *How We Think: Digital Media and Contemporary Technogenesis*, Chicago, University of Chicago Press, 2012.

reader and the author, is an ephemeral ogre or monster of unprocessed information, that he has no time to turn it into a nutritional substance for his spiritual evolution. The information in the selected literary text remains fractured, broken, randomly combined or juxtaposed in another text online or printed and unreadable chronologically. For literatures and scientists, reading in varied technological environments, as opposed to classical reading of printed text, has the advantage of search, selection and copying. It is also about the dissemination of selected, processed material. With only one condition, the human processing time of the information presented should not be diminished, and the correction of the final text should also be done on paper.

The reader's readability is diminished in the case of electronic texts placed on e-reader devices, because it offers the ability to navigate online by interrupting linear reading, to learn more about the author, about the places described in the novel, information about the characters in the novel, which are the most read or most commented passages.

In terms of software, many readers prefer *reflowable* texts, that is, texts without a fixed number of pages that can be read with different font sizes. Professional readers, the scholars, on the one hand, prefer fixed page texts so that they can be cited in academic publications.

III. From Close Reading to Distance Reading in the Field of Digital Humanities: the Case of Romanian Literature from 1850-1920

In Romania, this moment of the junction of humanities with mathematics and computer science is described by academician Solomon Marcus (*Singurătatea matematicianului/ The Loneliness of the Mathematician*):

> The listed events took place at a time when computer science was born in Romania, under the wand of the extraordinary creative energy conductor who was Grigore C. Moisil. And because, in the words of the poet, all these things had to bear a name, various labels were invented, one of them being *mathematical linguistics*. [...]
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> As a result, it followed a vertiginous development, partly mirrored in the recent volume of Grigore C. Moisil and his followers in theoretical computer science (Ed., Romanian Academy, 2007). In this atmosphere, I drafted the mathematical linguistics course that the Didactic and Pedagogical Publishing House published in 1963, with the reserve considered normal for an apparently dangerous enterprise. [...] I have always felt, in this new phase, the support of Great Teachers Alexandru Rosetti, Grigore Moisil and Miron Nicolescu. Then we discovered that, through interaction with socio-human disciplines, mathematics and computers acquire a cultural value for a broad audience[6].

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[6] Solomon Marcus, *op. cit.*, pp. 15-17.

In Romania, the true digitization of catalogs in libraries begins after 1990 (the Romanian Academy Library) and the scanning of the first books begins when personal computers/ PCs begin to be part of the daily literacy work, approximately at the beginning of the first millennium. The first digitized libraries (collections of the municipal libraries – digibuc, collections of the county and university libraries – BCU, BCU Lucian Blaga) are starting to function. Generalizing the use of the Internet by installing the appropriate networks is approximately in 2010, when Romania is considered one of the countries in which the speed of surfing on the Internet is a maximum. Accessibility of on-line reading devices/ media is taking place around 2010, when generations of devices are being refined every year and their online readers of novels are emerging.

Solomon Marcus compares mathematical to literature regarding the changing of the reading paradigm by *hypertext* by discussing *addiction to long contexts* and emphasizing differences long before these changes in reading media[7].

In the essay *Hyper-Readers and Their Reading Engines,* James J. Sosnoski defines hyper reading in relation to "computer assisted reading practices based on the need for a screen"[8] and identifies eight operations adjacent to this method: ***filtering, skimming, pecking, filming, trespassing, de-authorizing and fragmentation.*** The hyper-reader is more selective by filtering the texts read on the screen than the ones printed[9], because it has search engines[10]. Skimming implies that an article can only select what is of interest to help the reader who has a lot to read[11]. Stuffing/ pecking/ digging requires that the lecturer chooses a little bit of everything without following the logic of texts from which he selects various fragments[12]. The imposing is the fourth strategy described by Sosnoski, which refers to the fact that after reading the hypertext (an encyclopedic article) the reader wonders whether what he read is true or a lie, because hyper texts have less coherence, unity and authority than it has a novel or a poem. The hypertext reader is more interested in mining, imposing his point of view in the text, and using it in his own interest, imposing his own meaning[13]. Filming is the reading strategy that refers to the graphical elements and verbal elements of the text, a report that favors the image in hypertext[14]. In other words, the reader is "filming" the images, that is, disadvantaging reading the text. Hyper-readers are considered to be text breakers, because they attribute hypertext to countless authors in the public domain. Any kind of link that a

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[7] *Ibidem*, pp. 32-34.
[8] James J. Sosnoski, "Hyper-Readers and Their Reading-Engines", in *Passions, Politics, and 21st Century Technologies*, ed. Gail E. Hawisher und Cynthia L. Selfe, Urbana, Utah State University Press, 1999, p. 167.
[9] *Ibidem*, p. 163.
[10] *Ibidem*, p. 166.
[11] *Ibidem*, p. 167.
[12] *Ibidem*, p. 168.
[13] *Ibidem*.
[14] *Ibidem*, p. 169.

site creates to another site is an act of canceling authority, because it uses it for its own purposes[15]. Trespassing[16] is one of the frequent mistakes of the hyper lector/ hyper reader, which must respect the rigors of restoring the boundaries of the text to avoid plagiarism[17]. The authority of hypertext takes place at the moment when the hyper lecturer/ reader dismisses the author, assuming by assembling and reassembling the text fragments in his/ her own structure/ form for which he/ she signs up as an author[18]. With respect to the last three reading strategies (violation of hyper-text boundaries, deprivation of authority and fragmentation), the border between the reader and the author simply disappears, since fragmentation offers the logical, topological and associative freedom of the fragments[19].

The eight hyper-reading strategies, Catherine Hayles, author of the study *How We Think: Digital Media and Contemporary Technogenesis*, published in 2012, adds the juxtaposition strategy (i.e. the comparison through two or more open windows on the same screen) and scanning (that is the operation of collecting all the images related to the subject of interest).

The fundamental question resulting from Hayles' study was how to transform into reading skills all these theories of reading strategies in the digital age and how to build a bridge between reading text on paper and reading the text in digitized format[20].

Social reading is a form of collaboration in the online reading process that involves discussions that increase the time of reading and understanding, and which is transformed into a collective reading experience. The project of reading *The Golden Notebook* by Doris Lessing based on asynchronous communication is an example of social reading. Social reading is formal in opposition to the little discussion about reading, participation may be synchronous or asynchronous (lecturers read when they can, simultaneously or not, the same text). Social reading is persistent in opposition to any conversation. It creates a certain reading medium, but does not exclude the other, that is, deep, classical reading.

Distant reading is a form recently evaluated by Italian studies by Franco Moretti, in contrast to close reading. While close readers focus on one particular feature of the literary text, the distant reader can analyze hundreds or thousands of literary texts to identify patterns at a general historical scale, patterns that do not take account of historical boundaries or limitations time. Distant readers use methods in social and natural sciences. The result of these studies is a graph, a map, or a tree. It is not for the first time in cultural history

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[15] *Ibidem*.
[16] *Ibidem*, p. 163.
[17] *Ibidem*, p. 170.
[18] *Ibidem*.
[19] *Ibidem*, p. 172.
[20] N. Katherine Hayles, *How We Think: Digital Media and Contemporary Technogenesis*, ed. cit., p. 56.

when geometry appears in humanist studies. The books of Franco Moretti, the Italian professor at Stanford University, have generated anxiety about abandoning close reading and related studies, thanks to the interest in combining mathematics and geography with literary studies, and following computational analysis on a database identifies recurrent patterns, evolutions and involutions on a large historical scale of some literary species such as the novel. Whether it is the wave of the epistolary novel, the tide of the Gothic novel or the tide of the historical novel, its maps illustrate the distribution of protagonists in various social environments. The map of protagonists in Paris focuses on the symmetry axis represented by Seine, where protagonists of the novel live in the artistic world of the left bank, while the protagonists of the novels live in the north of the Seine, in the commercial area and in the area aristocratic St. Germain. Through the trees, Moretti develops the development of the indirect style. Studies by Franco Moretti represent a quantitative analysis of the information from the European novels from 1800-2000. The main arguments of the author regarding the use of distance reading / distance reading are:

1. Instead of focusing on the semantic and syntactic study of a single author, critique has the possibility of scanning a large number of texts, turning them into databases for studying recurrent progressive and regressive patterns at various species literary preferences like readers.

2. Expansion and reopening of the literary canon by analyzing lost or forgotten literature (written literature by women, written by black people) in the canon that included only exceptional names like Shakespeare, Goethe, etc. all authors being "white men".

3. Greater objectivity in the analysis of literature, beyond the norms, values and prejudices of each literary critic.

The novelty of Franco Moretti's advanced reading (distance reading) strategy consists in associating computer programs in literary studies and databases to analyze some research themes.

Solomon Marcus explains the interference of mathematics/ computer science in the architecture of the human spirit mirrored in the human sciences over time.

> First, following the thread of the development of mathematics in ancient Greeks, we find its predominantly spiritual character, the vocation of contemplating harmonies of forms and archetypes. Inventing the theorem is a spiritual acquisition that, alone, would be sufficient to ensure the prestige over millennia of ancient Greek culture[21].

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[21] Solomon Marcus, *op. cit.*, p. 54, 55 and 56.

As well as distance reading, *surface reading* is a new professional reading strategy that concentrates not on the interpretation of the literary text, but on the materiality of the books, on the material from which they are made. For surface lecturers, reading a printed book or an e-book is a big difference. A big difference is also the reading of a Shakespeare piece in a bibliophile edition, in the Editio Princeps wrapped in leather, in a cheap edition of the 21st century on a hard or printed. The material of the book counts a lot for this type of reading. Surface lecturers claim that the material in which the book is made possesses the so-called tactile qualities that compute the knowledge of the haptic qualities. Hand Reading aesthetically examines the quality of the book in the reader's hand. The latter appreciates "touch qualities and mobility features". The study of touch is regarded as a "way of communication"[22].

IV. Romanian Literary History and the Transnational Knowledge Modes by Distance Reading of Literary Facts: 100 Romanian Novels from 1850-1920

Any database remains accessible or not, depending on the types of media and programs used to build it. In a world where communication bridges for computer programs are cut every 10 years, the question of the sustainability and accessibility of data by the next generation is one of the most important. The COST Action on Distance Learning in European Literary History, CA16204 DISTANT READING FOR EUROPEAN LITERARY HISTORY looks at the project of selecting 100 novels from each European literature from 1850-1920 and proposed a grouping of ideas to guide the selection on *https://distantreading.github.io/sampling_proposal.html*.

a. Selection Criteria

As each literature has its own particularities, its own media, its own texts relating to the realistic novel, the popular novel, the main challenge is related to the criteria of comparison, i.e. the elements that are found or not in all the comparative literatures. It is also important to emphasize that each literature has become acquainted with this literary species (the novel) at a certain time when the meaning of the notion of author was different. The proportion of authors identified between 1850 and 1920 (men and women, at least 20%) could lead to the canon being enlarged. The project focuses on identifying the elements that are common to the literatures of the period and the differences between them, if something else needs to be emphasized or something should be removed.

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[22] *Reading by Hand – the haptic evaluation of artists' books*, https://www.researchgate.net/publication/26410992_Reading_by_Hand_the_haptic_evaluation_of_artists%27_books, accessed May 8, 2018.

b. Digitization and Sources

Selection of metadata texts, bibliography based on standard bibliographic descriptions, selection of authors, creation of lists of files available for each literature starting from confirmed academic "inventories" (*Dicţionarul romanului românesc [Dictionary of the Romanian novel]*), selection of popularity elements from these lists to recommend the respective novels for the list of 100 novels and the digitization of these materials within two years in pdf format.

The issue of the common selection criteria highlighted the fact that the language of publication and especially the place of publication of the literary work changed the membership of the respective work. (The case of Bucura Dumbravă's literature, a German and Romanian language writer who made Romania known by the Romanian subjects of his novels in German, made it clear that her novels are not included in any literary canon (yet!).)

There are times when some authors dominate the publication of a larger number of novels, putting their mark on the age or the works of other authors. The importance of digitized materials is important. The balance between canonicity and non-canonic must be balanced in order to rewrite the canon.

Foreign language editions of the same novel are a test of popularity. In the same sense, the editions repeated successively in the same language are a test of popularity.

c. Conclusions: Translating & Exporting from National Literary Histories

In the case of the Distant Reading project, the possibility that Romanian literature to be on the map of European literature in a certain period is conditioned by the concerted effort of several actors over time: the literary critic/ historian, the bibliographer, the bibliologist and the IT team from the (national, regional, academic, metropolitan) library, the financier (city hall, university, academy, county councils), and project researchers from the team.

In the case of university education in Romania, the current lack of a field of study generically called Digital Humanities is an element, which by its use could change the coordinates of perception and dissemination of Romanian literature in the world.

Primary bibliography for this field, consisting of the inventory of corpuscles on literary species and periods (*Dicţionarul cronologic al romanului românesc*, made by the Institute of Linguistics and Literary History "Sextil Puşcariu" of the Romanian Academy), or inventory of works translated into European languages, (*Bibliografia relaţiilor literaturii române cu literaturile străine în periodice [The Bibliography of Romanian Literature Relations with Foreign Literatures in Periodicals]*, coordinated by Professor Dan Grigorescu and published at the Institute of Criticism and Literary History George Călinescu in Bucharest) is the first step in this process.

Computerized packaging of corpus literary content presents access risks, risks that need to be evaluated and resolved in agreement with software and hackers.

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