Linguocultural Characteristics of Scientific Activity
Object Domain in Critical Remarks in English Research Articles

Olena Balatska*, Larysa Sainenko2, Larysa Babash1, Maryna Moskalenko4

1 Poltava National Technical Yuri Kondratyuk University, Ukraine
2 Poltava National Technical Yuri Kondratyuk University, Ukraine
3 Poltava National Technical Yuri Kondratyuk University, Ukraine
4 Poltava National Technical Yuri Kondratyuk University, Ukraine
*Corresponding author E-mail: balatska.olina@gmail.com

Abstract

The article examines linguocultural characteristics of SCIENTIFIC ACTIVITY object domain in critical remarks in English research articles considered to be the leading genre of scientific discourse. The methods used in the research include cognitive-discursive interpretation method, text-interpretation analysis, and quantitative analysis. The problem has been studied in a corpus of 1027 critical remarks including 2268 critical utterances registered in 350 English-language research articles from ten scientific disciplines. The article presents classification of critical remarks developed on the basis of components of scientific activities which include PROBLEM / TOPIC, THEORY, METHODOLOGY, DATA, RESULTS, CONCLUSIONS, TEXT, HYPOTHESIS, and RESEARCH. Percentage of using every object of criticism has been calculated. It has been found out that verbalization of every type of criticism varies and is influenced by the group factor.

Keywords: classification of critical remarks; critical remark; criticism; genre; linguocultural characteristics; research article; “Scientific activity” object domain; scientific discourse.

1. Introduction

In recent decades, there has been a dramatic increase in interest in scientific discourse due to the vital role science plays in various branches and spheres of modern society’s life [7; 8; etc.]. As a result, genres of scientific discourse [11; 12; etc.], in particular a research article which is considered to be the leading genre of scientific discourse [11; 12], have become a central issue for linguists.

Criticism is a compulsory component of a modern research article, which has already been addressed in numerous studies [4; 5; 9; 10]. In addition, several studies investigating objects of criticism in English research articles have been carried out [1; 2], but these studies have not treated linguocultural characteristics of objects of criticism in English research articles.

The aim of this work is to examine linguistic and cultural specifics of SCIENTIFIC ACTIVITY object domain in critical remarks in English research articles.

This problem has been studied in a corpus of 1027 critical remarks, which contain 2268 critical utterances and were registered in 350 English research articles from ten scientific disciplines (Anthropology, Business and Management, Education, History, Law, Linguistics, Literature, Political Science, Psychology and Sociology). The analyzed research articles were published in scientific journals of the UK and the USA from 2009 to 2011.

2. Main body

In this paper, the term criticism is used to refer to verbally expressed negative attitude of the author to a scientific research / its fragment that is verbally realized in a research article (RA) as a critical remark (CR).

As already mentioned, the object of criticism in English research articles (RAs), is an aspect of scientific activity, and so far as this activity is carried out by the scientist who is the subject of criticism, the scientist himself / herself may also be the object of criticism. In view of this, when analyzing objects of criticism in English RAs we classify criticism object domains into 2 broad types, which are SCIENTIST and SCIENTIFIC ACTIVITY. In doing so, we take into account classification of objects of criticism, whose author recognizes “Research”, “Author's scientific activities” and “Personality of the author” [6]. However, comparing the first type (“Research”) with the SCIENTIFIC ACTIVITY object area, we do not consider it appropriate to distinguish between scientific activities and personality of the scientist (especially as obtained empirical results show that in our sample there are practically no CRs in which personality traits of a scientist are criticized). Therefore, everything that concerns the author of a criticized RA, we consider to belong to SCIENTIST object domain.

Analyzing parameters of SCIENTIFIC ACTIVITY object domain, we believe it appropriate to base on existing classifications, in particular on the results of the study of the conceptual space defined as SCHOLARLY RESEARCH [3], which, according to the
data acquired by the author, includes 98 different reference concepts belonging to 13 domains, which correspond to components of scientific activities, namely: PROBLEM, TOPIC, SCIENCE, HYPOTHESIS, RESEARCH, DATA, OBJECTIVE, METHODOLOGY, EVIDENCE, RESULT, DISCUSSION, THEORY and TEXT. Most of the mentioned components were registered when analyzing factual material of our research as those that can be used as objects of criticism in CRs in English RAs.

PROBLEM / TOPIC of the study, in particular, no / lack of knowledge of a scientific problem, disagreement with another author on the object chosen to be investigated, its mismatch with the intended purpose or any other limitations of the object of the study that may affect the results in one way or another, was recorded as an object of criticism in 37.29 % of all CRs, e.g.:

(1) Although recent anthropological theories converge on the point that dance constitutes a site of “both gender struggle and class struggle” (Washabaugh 1998: 9), much of this literature has emphasised the study of gendered (Abu-Laghod 1985, 1986; Cowan 1990; Hanna 1988; Butler 1990; McNay 1992; Kirtsgoulou 2004- but see Manuel 1988 for a different view) contentions rather than its potential in terms of agency (Gell 1998) and political consequences.

The CR above illustrates criticism of a wrongly chosen object of research, from the author's point of view, in most of the scientific works the author mentioned had analyzed.

(2) Although many authors have recognized that judges act strategically, they have largely studied short-term strategy: how judges ensure their favored outcome in any given case. For most studies, an assumption of short-term judicial focus is implicit;23 for others it is explicit.24 But there is no reason to assume that judges have such a myopic focus, particularly those with lifetime tenure. Judges may seek to have the capacity to set the law of the land (or state or region), and thus may be willing to sacrifice their preferred outcome in a given case to find a better vehicle to direct the development of the law.

Example (2) presents a CR, indicating incorrectness of choosing for an object of the research judges’ activities that have short-term rather than long-term effects / results.

(3) Although researchers have applied this theory in school settings, few studies address middle school learners (Evans & Craig, 1990; Murdock & Miller, 2003). In the above CR, the object of criticism is the lack of knowledge of the problem, i.e. the practical absence of studies focusing on secondary school students.

It has been found out that the highest percentage distribution of CRs whose object of criticism is PROBLEM / TOPIC of the study was recorded in RAs in Business and Management, and Sociology. Lower number of the CRs was observed in RAs in Anthropology, Education, Law, Literature, and Psychology. The smallest number of these CRs was registered in RAs from History, Linguistics and Political Science. The results obtained are reported in Table 1.

Table 1. Percentage of critical remarks criticizing PROBLEM / TOPIC of the study.

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>38.93</td>
</tr>
<tr>
<td>Business and Management</td>
<td>55.93</td>
</tr>
<tr>
<td>Education</td>
<td>33.93</td>
</tr>
<tr>
<td>History</td>
<td>45.6</td>
</tr>
<tr>
<td>Law</td>
<td>43.24</td>
</tr>
<tr>
<td>Linguistics</td>
<td>28.78</td>
</tr>
<tr>
<td>Literature</td>
<td>34.06</td>
</tr>
<tr>
<td>Political Science</td>
<td>21.74</td>
</tr>
<tr>
<td>Psychology</td>
<td>39.49</td>
</tr>
<tr>
<td>Sociology</td>
<td>51.19</td>
</tr>
</tbody>
</table>

Limitations of THEORY include any drawbacks, flaws, mistakes, inconsistencies or contradictions in the author’s point of view, concept or proposition developed by him / her. According to our calculations, this type of CRs includes 27.65% of all CRs, e.g.:

(4) SRSs are not devoid of negative aspects. Instructor time is needed, both to become proficient with the computer hardware and software and to prepare challenging questions. Class time is also required for presenting questions, reviewing the histogram, and providing remediation. Technical problems can occur with these systems which may result in lost data or delay of class presentation. Additionally, the cost of purchasing the RRD (approximately $20-$40 U.S.) may be too burdensome for some students.

The author of the RA in this CR lists some limitations of the developed Student Response System, which is carried out through the use of technical devices, and expresses disagreement with existing theoretical propositions, namely, with the idea of undeniable effectiveness of the method when applied in the educational process.

(5) Most likely, most observers would agree on there being authoritarian regimes with and without parties, and most likely, most observers would agree that democratic regimes, in contrast, function solely through the operation of parties and that parties are the core institution of democratic politics’ (Lipset, 1996:169). However, whereas the first observation is correct, the second is not.

In Example 5, the researcher disagrees with a theoretical proposition, in particular, with the way some scholars understand conditions necessary for appropriate functioning of democratic regimes.

(6) With this in mind, I must admit to being rather shocked by Nolan’s assertion that anthropologists carry ‘few preconceptions’ about the subjects of their research (2002). I find this remark at best highly optimistic, and would be more inclined to agree with Escobar: “In their studies, and in spite of themselves, development anthropologists impose upon local realities social and political analyses that have travelled well-known terrains... not merely neutral frameworks through which ‘local knowledge’ innocently shows itself.” (1991:659).

CR 6 shows how the author of the RA disagrees with a theoretical proposition, in particular with the view of another scientist on peculiarities of anthropologists’ activities.

The current study has found that RAs in Education, Law and Literature contain more CRs criticizing THEORY of the study, than RAs in Anthropology, History, Linguistics, and Political science, while such CRs in RAs from Business and Management, Psychology and Sociology were found to be rare (see Table 2).

Table 2. Percentage of critical remarks criticizing THEORY of the study.

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>22.03</td>
</tr>
<tr>
<td>Business and Management</td>
<td>6.78</td>
</tr>
<tr>
<td>Education</td>
<td>35.71</td>
</tr>
<tr>
<td>History</td>
<td>27.19</td>
</tr>
<tr>
<td>Law</td>
<td>41.89</td>
</tr>
<tr>
<td>Linguistics</td>
<td>26.21</td>
</tr>
<tr>
<td>Literature</td>
<td>47.25</td>
</tr>
<tr>
<td>Political Science</td>
<td>31.16</td>
</tr>
<tr>
<td>Psychology</td>
<td>11.76</td>
</tr>
<tr>
<td>Sociology</td>
<td>14.29</td>
</tr>
</tbody>
</table>

METHODOLOGY used, i.e., limitations of the methods employed in the process of conducting the research or their complete non-compliance with a particular study, namely indication of flaws or drawbacks of the method used to analyze or record the research data, pointing out to the fact that the methods selected do not help to achieve the objective, criticism of the scientific approach to the object of the study, in other words, the presence of a CR concerning activities that were or were not performed by a scientist in the course of the study, is registered as an object of criticism in 14.12 % of all registered CRs, e.g.:

(7) A previous study has shown that the German nasal index is similar to that of the general Western Europeans average of nasal index of 71.0 and below leptorrhines 27. Although nasal index of
Yorubas has been investigated previously using smaller sample size, the study was however not comprehensive enough as other nasal parameters: nasal height and nasal width as well as age groups of subjects were not included in previous studies. The above CR points to limitations of the applied method, since the mentioned study was carried out without analyzing several important parameters.

(8) Another weakness with the past research evaluating SRSs involves the type of control/comparison condition used. In past research (e.g., Pemberton et al., 2006), SRSs were compared to a traditional instructional style which, in general, is a passive method involving little student-teacher or student-peer interaction. A comparison of SRSs with a traditional method of instruction does not address whether more interactive approaches are equally or more effective.

In CR 8, the authors of the RA express their opinion about the methods chosen for the study and lists their limitations.

(9) On the face of it, it might appear ‘logical’ to distinguish, as Tokieda did, between the subject-marking -ga and the object-marking -ga; yet, this analysis is too aprioristic and deductive, in the sense that it posits the categories ‘subject-marker’ and ‘object-marker’ first, and then imposes them on the empirical reality of the language. I do not find this an appropriate way to deal with language. Rather, I maintain, we should start from the bottom up, collect empirical data involving -ga, and proceed inductively, so as to come to identify the true meaning of -ga.

In this example, the author criticizes the method used by another linguist to conduct research, and offers his own way of organizing the process of studying the issue under consideration.

The results of our study show that the number of CRs criticizing METHODOLOGY was considerable in RAs from Political Science, Psychology and Sociology. The percentage of the CRs in RAs in Anthropology, Education and History was smaller. The minimum amount of the CRs was recorded in RAs in Business and Management, Law and Literature (see Table 3).

Example (11) shows how the author of the RA indicates that the definition in question is not precise enough and lacks some important components.

(12) Nonetheless, both scholars kept calling –ga a ‘nominative case-marker’ (subject), even when it was used in sentences such as (c) and (d), above, where, as they acknowledged, NP-ga marked the ‘object’, not the ‘subject’. It is hard to understand why the same term, shu-kaka <…> (nominative case), was used in such cases, too, despite the fact that NP-ga, in such environments, clearly has a sense different from the one it has in (a) or (b).

In the above CR, the author criticizes inadequate use of linguistic terms by other scholars.

The data yielded by this study provide convincing evidence that CRs criticizing TEXT of the paper are much more numerous in RAs in History and Political Science, than in RAs in Anthropology, Business and Management, Law, Linguistics, Literature, Psychology and Sociology. Furthermore the CRs were not registered in RAs from Education (see Table 4).

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks criticizing METHODOLOGY, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>11.27</td>
</tr>
<tr>
<td>Business and Management</td>
<td>5.08</td>
</tr>
<tr>
<td>Education</td>
<td>12.5</td>
</tr>
<tr>
<td>History</td>
<td>8.78</td>
</tr>
<tr>
<td>Law</td>
<td>4.65</td>
</tr>
<tr>
<td>Linguistics</td>
<td>22.3</td>
</tr>
<tr>
<td>Literature</td>
<td>6.59</td>
</tr>
<tr>
<td>Political Science</td>
<td>21.01</td>
</tr>
<tr>
<td>Psychology</td>
<td>17.64</td>
</tr>
<tr>
<td>Sociology</td>
<td>19.05</td>
</tr>
</tbody>
</table>

CRs criticizing TEXT of the study, for example, those indicating insufficient amount of information concerning an issue provided in it, that is, the lack of any graphic, tabular or verbal data needed to understand the concept developed by the author of the RA [274], inadequate use of terminology, etc., were registered in 6.52 % of all CRs, e.g.:

(10) The Harun Yahya website cites Tirmidhi for this hadith attributed to Wahb bin Muneebuh but does not provide the precise citation.

In CR (10), the author criticizes the absence of a literal quotation in the analyzed RA.

(11) There is nothing wrong with this definition, but it does not give a complete picture. It simply asserts that seniority and authority are attributes that determine pronominal use. But it does not account for the fact that a noun need not use nu’u at all times when she (the pronoun occurs more frequently in female speech) engages in a verbal exchange with a pètvù. In addition, it does not indicate that the speaker may switch to other pronouns while interacting with the same addressee.

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical marks criticizing TEXT of the paper, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>3.39</td>
</tr>
<tr>
<td>Business and management</td>
<td>1.69</td>
</tr>
<tr>
<td>Education</td>
<td>—</td>
</tr>
<tr>
<td>History</td>
<td>11.4</td>
</tr>
<tr>
<td>Law</td>
<td>2.7</td>
</tr>
<tr>
<td>Linguistics</td>
<td>6.42</td>
</tr>
<tr>
<td>Literature</td>
<td>9.89</td>
</tr>
<tr>
<td>Political science</td>
<td>15.24</td>
</tr>
<tr>
<td>Psychology</td>
<td>1.68</td>
</tr>
<tr>
<td>Sociology</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Limitations, flaws and drawbacks of DATA selected for the research or obtained in the course of its implementation, their mismatch with the purpose of the research were recorded as an object of criticism in 6.34 % of all CRs, e.g.:

(13) Research limitations need to be acknowledged. The data utilized for the current analysis was cross-sectional data and limits our ability to examine directionality of drug misuse. The sample was drawn from a single state, thus limiting its generalizability. In addition, no survey data is available for students who were absent the day the survey was administered. CR 13 criticizes the data used to conduct the study, in particular, the author focuses attention on their cross sectional nature, and the fact that authors of the RA drew their sample on the territory of only one US state and emphasizes the lack of the survey data for an experimental groups.

(14) Many older circus people have little or no formal schooling, and rely on the oral transmission of culture and knowledge via an extended family network. During this research, most circus people shared a sound intergenerational knowledge of circus histories, genealogies and stories. Whilst inconsistencies were present, these discrepancies were usually in the smaller details, rather than the broader histories. It must be noted that many of the older circus interviewees were looking back over their lives from a vantage point of eighty or ninety years, and some nostalgia was inevitably present in the attitudes they shared.

In Example 14, the author draws attention to minor flaws and drawbacks of the data used in analyzing history of the Australian circus, and accentuates that such flaws were caused by psychological characteristics of those who were invited to participate in the study.

(15) Although this was an exploratory, qualitative study with a small sample from one geographic region – the San Francisco Bay Area – it illuminates some of the issues facing parents, partners, and other relatives of veterans serving in the Iraq and Afghanistan Wars, none of which appear to be qualitatively different from those facing spouses of veterans.
In CR (15), the author argues that limitations of the data used for the study include a small sample size which was made in just one geographical area, namely in the San Francisco Bay Area.

It is apparent from the results obtained that the amount of CRs criticizing DATA was more significant in RAs from Anthropology, Business and Management, and Education, than in RAs from History, Law, Linguistics, Political Science, Psychology, and Sociology. The results from the analysis of the CRs demonstrate that generally such CRs are not typical for RAs in Literature (see Table 5).

### Table 5. Percentage of critical remarks criticizing DATA of the study

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>13.56</td>
</tr>
<tr>
<td>Business and Management</td>
<td>13.57</td>
</tr>
<tr>
<td>Education</td>
<td>10.71</td>
</tr>
<tr>
<td>History</td>
<td>2.63</td>
</tr>
<tr>
<td>Law</td>
<td>4.65</td>
</tr>
<tr>
<td>Linguistics</td>
<td>6.42</td>
</tr>
<tr>
<td>Literature</td>
<td>—</td>
</tr>
<tr>
<td>Political Science</td>
<td>3.62</td>
</tr>
<tr>
<td>Psychology</td>
<td>8.43</td>
</tr>
<tr>
<td>Sociology</td>
<td>8.39</td>
</tr>
</tbody>
</table>

Limitations of RESULTS obtained by the author(s) of the RA or other scholars, that is, the unreliability of the results, the presence of errors and limitations in them due to specific conditions or methods applied in the course of the research, etc., are observed in 4.77% of all CRs:

(16) The findings may not generalize to other locations or populations. Additionally, the response rate to the survey was 14%. It is possible that important differences exist between those who chose to respond and those who did not. <…> Another important limitation to the study is that the Cronbach alpha coefficients of some of the themes on the survey instrument fell slightly below .80, which is generally considered to denote adequate reliability (Nunnally & Bernstein, 1994). Nunnally and Bernstein suggested that reliability coefficients ranging from .70 to .79 be considered modest.

In the CR above, the author lists factors that could affect the results he had received, and points to the limitations of the collected data.

(17) In this study, the attempted direct detection of lying resulted in very poor accuracy. In Example 17, the author of the RA points out that the results obtained may have significant errors.

(18) To summarize, results from a large number of investigations, while variant in methodology, suggest important relationships between mood, eating behavior and weight. However, findings are inconsistent and, in some cases, differ by gender.

CR (18) presents criticism concerning inconsistency and significant differences between the results obtained in the course of the research. The findings of our study suggest that RAs in Business and Management and Psychology have the largest percentage of CRs criticizing RESULTS of the study, while the percentage of the CRs was much smaller in RAs from Anthropology, Education, Law, Linguistics, Political Science and Sociology. What is interesting in the obtained findings is that these CRs are not used in RAs in History and Literature (see Table 6).

### Table 6. Percentage of critical remarks criticizing RESULTS of the study

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>7.44</td>
</tr>
<tr>
<td>Business and Management</td>
<td>13.56</td>
</tr>
<tr>
<td>Education</td>
<td>3.57</td>
</tr>
<tr>
<td>History</td>
<td>2.87</td>
</tr>
<tr>
<td>Law</td>
<td>—</td>
</tr>
</tbody>
</table>

**Conclusions** of the study, their inconsistence or any contradictions in them, including the lack of data provided analyzed to obtain valid conclusions, as well as inadequate interpretation of the results from the point of view of the author of the RA, were recorded to be the object of criticism in 2.04% of all CRs, e.g.:

(19) Previous works on Thai pronouns and sentence-final particles (Cooke, 1968, 1989; Gething, 1972; Hoonchamlong, 1992, among others) assert that the forms are used according to social categories such as gender, age, and social status. This assertion is indeed an oversimplification of linguistic reality. As indexicals acquire their meanings from the characteristics of the situations in which they occur, their meaning cannot be given or determined.

In this example, the author of the CR draws attention to inadequacy of the conclusions regarding the use of pronouns and particles used at the end of a Thai sentence.

(20) Abdullah b. Sarjis, however, states that it is “between his shoulders on the left side of his shoulder.” That expression “left side of his shoulder” is a poor translation for “his left shoulder blade,” for the original text says naged, an archaic Arabic word meaning “shoulder blade” (cf. modern Arabic nagd, “cartilage of the shoulder blade,” Steingass 1134). Even with this correction, the precise location seems unclear, either between the shoulders or on the left shoulder blade.

In the CR above the author criticizes the conclusions to which another researcher came and which concern location of the mole, the symbol of his special status, on the principal character of a famous literary work.

(21) Table 2, e.g., shows that 22 out of 27 questions (81.5%) have yielded responses which involve 70% or more positive values, i.e. ‘STRONGLY AGREE’ and ‘AGREE’. On the face of it, such results could be taken to indicate very high levels of motivation in Saudi EFL learners. Our view, however, is that such an interpretation of the results would be too simplistic, and is quite likely to be wrong. Assuming high levels of motivation in Saudi EFL learners would be in contradiction with their generally low level of second language achievement, and would not bring us any closer to understanding the roots of the problem of the relative lack of EFL success in Saudi Arabia.

CR (21) illustrates that the author of the RA considers interpretation of the results of the study to be too simplistic and those that could be made by other researchers or himself/herself without performing their detailed in-depth analysis.

The results of the study indicate that RAs in Business and Management, Political Science and Psychology contain substantial number of CRs criticizing CONCLUSIONS. The number of the CRs is more limited in RAs in Education, History, Linguistics, and Literature. RAs in Anthropology, Law and Sociology have no CRs that belong to this type (see Table 7).

### Table 7. Percentage of critical remarks criticizing CONCLUSIONS of the study

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>—</td>
</tr>
<tr>
<td>Business and Management</td>
<td>3.39</td>
</tr>
<tr>
<td>Education</td>
<td>1.79</td>
</tr>
<tr>
<td>History</td>
<td>0.88</td>
</tr>
<tr>
<td>Law</td>
<td>2.21</td>
</tr>
<tr>
<td>Linguistics</td>
<td>1.43</td>
</tr>
<tr>
<td>Literature</td>
<td>—</td>
</tr>
<tr>
<td>Political Science</td>
<td>3.62</td>
</tr>
<tr>
<td>Psychology</td>
<td>4.2</td>
</tr>
<tr>
<td>Sociology</td>
<td>—</td>
</tr>
</tbody>
</table>
**Hypothesis**, formulated by a scientist, in particular indication of any limitations, drawbacks, mistakes, inconsistencies or contradictions in it, was registered as an object of criticism occasionally, namely, in the 0.88 % of all CRs.

(22) The hypothetical design of our experiment is both a strength and weakness in that we can demonstrate preferences that may be hidden in actual behavior at the same time as expecting that these preferences are likely to play out differently in actual behavior when modulated by expectations and demands.

In Example 22, the author of the CR points out that the hypothetical design of the experiment may have some flaws and limitations (along with some positive features).

(23) The hypothesis presented here is underspecified and vague but may be progressive as is thought that analyzing disease states from an evolutionary perspective can ultimately do much to inform and influence medical theory and, ultimately, even intervention strategy.

In CR (23), the author states that the hypothesis presented in the RA is not clear and definite enough.

This study has found that generally HYPOTHESIS is criticized in RAs in Anthropology, Linguistics and Psychology only, whereas such CRs were not recorded in RAs from Business and Management, Education, History, Law, Literature, Political science and Sociology (see Table 8).

**Table 8. Percentage of critical remarks criticizing HYPOTHESIS of the study**

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>1.69</td>
</tr>
<tr>
<td>Business and management</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>—</td>
</tr>
<tr>
<td>History</td>
<td>—</td>
</tr>
<tr>
<td>Law</td>
<td>—</td>
</tr>
<tr>
<td>Linguistics</td>
<td>2.84</td>
</tr>
<tr>
<td>Literature</td>
<td>—</td>
</tr>
<tr>
<td>Political science</td>
<td>—</td>
</tr>
<tr>
<td>Psychology</td>
<td>2.52</td>
</tr>
<tr>
<td>Sociology</td>
<td>—</td>
</tr>
</tbody>
</table>

**Research** as a whole, without any reference to its specific aspects, is criticized very rarely and was recorded as an object of criticism in 0.39 % of all analyzed CRs.

(24) Strengths and weaknesses, advantages and limitations of such research are obvious, well-known and will not be reviewed here.

In this example, we can see a CR, in which the author, without giving a reason for the negative evaluation of research conducted by other scholars, expresses his / her critical attitude towards it (along with positive evaluation). Thus, both CR (23) and CR (24) are not "pure". They belong to the peripheral realization of scientific criticism, which is another confirmation of non-typical nature of CRs whose objects of criticism are HYPOTHESIS and RESEARCH.

The results of this investigation show that generally the percentage of CRs criticizing RESEARCH as a whole is the largest in RAs from History and Linguistics. The percentage of the CRs is smaller in RAs in Anthropology, Education, Political science, Psychology and Sociology, whereas CRs criticizing RESEARCH are not used in RAs from Business and Management, Law, and Literature (see Table 9).

**Table 9. Percentage of critical remarks criticizing RESEARCH as a whole**

<table>
<thead>
<tr>
<th>Scientific discipline</th>
<th>Percentage of critical remarks, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>1.69</td>
</tr>
<tr>
<td>Business and Management</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1.79</td>
</tr>
<tr>
<td>History</td>
<td>3.51</td>
</tr>
<tr>
<td>Law</td>
<td>—</td>
</tr>
<tr>
<td>Linguistics</td>
<td>2.84</td>
</tr>
<tr>
<td>Literature</td>
<td>—</td>
</tr>
<tr>
<td>Political Science</td>
<td>0.72</td>
</tr>
</tbody>
</table>

**3. Conclusions**

Summing up the results, it can be concluded that the main part of CRs in RAs in the mentioned scientific disciplines criticize PROBLEM / TOPIC of the study and THEORY used in the paper. METHODOLOGY, TEXT, DATA and RESULTS are much less typical. CONCLUSIONS are criticized quite rarely, whereas RESEARCH as a whole and HYPOTHESIS are criticized occasionally.

The above makes it possible to conclude that quantitative characteristics of the types of objects criticized in English research articles vary somewhat depending on the scientific discipline, that is, the influence of the group factor here is significant. Further work needs to be done to establish linguocultural characteristics of objects of criticism in research articles in other languages and other academic disciplines.

**References**


