

LETTER TO THE EDITOR OF ARCHIVES OF CIVIL ENGINEERING (ACE)

Remarks to the paper published by Łukasz Skarżyński and Jacek Tejchman “Numerical mezosopic analysis of fracture in fine-grained concrete”, Archives of Civil Engineering (ACE), 3/2012, 331-361

FORMAL REMARKS

The authors have committed an autoplagiarism. They addressed their paper „The effect of aggregate characteristics on the fracture behaviour of fine-grained concrete under tensile loading” to the Editor of “Architecture, Civil Engineering, Environment” (ACEE), in Gliwice, and then they submitted their second paper with the modified title to the Editor of “Archives of Civil Engineering” (ACE) in Kielce.

Both Editorial Committees had no possibility to discover the fact that total content of paper proposed to ACEE has been repeated in that one proposed to ACE, because these actions were performed at the same time. Both papers were published: in ACE, 3/2012, 331-361 and in ACEE, 2/2012, 55-66.

In the paper in ACE they have repeated from ACEE:

- All formulae from 1 to 8.
- All illustrations from 1 to 15.
- All references in the list from 1 to 38.
- Table 1.
- Majority of the text.

In the paper submitted to ACE, figures nr 13 and 16 – 22 have been added, chapter 1 was slightly modified, and a few paragraphs have been added in chapters 4.4 and 4.5; also one reference and one table were added. It is characteristic that all conclusions were repeated.

Moreover, the description, illustrations, tables, and conclusions in the paper “Calculations FEM of concrete beams under bending at the mezo scale” (in Polish), published by the authors in “Inżynieria Morska i Geotechnika”, 2/2010, 353-360, were repeated in both above mentioned papers.

All this is an inadmissible increase of the authors’ “achievements” with no new research results. Such approach is clearly forbidden in the “Guidelines for Authors” in both journals and may be qualified as autoplagiarism.

REMARKS RELATED TO THE CONTENTS OF THE PAPERS

1. Testing and modelling of concrete beams without reinforcement under bending have no point, neither cognitive nor practical. Such elements are not applied in building practice for obvious reasons. The phenomenon of cracked zones in concrete was recognized and analyzed several years ago, mainly in axial tension. At present, it is completely useless to repeat those experiments and modelling of crack opening and propagation in concrete. No new results are supplied as it concerns concrete microstructure and design of concrete composition, neither on design of concrete elements.
2. Both experimental results described in the quoted paper [14] in ACEE and AIL, as well as the tests on modelling, indicate that this direction of research is useless. Similar tests were published several years ago on brittle cracking in concrete, and the results of modelling do not bring any new results, neither for improvement of practice nor for extension of knowledge.
3. The conclusions presented in both papers are trivial, e.g. it is obvious, without any testing and analyses that the crack propagation depends on the material microstructure.
4. The multiplication of various papers published by the group led by Professor J. Tejchman in various journals on the same subject is astonishing. Number of publications was increased through addressing different editorial offices and conference organizers, and by artificial complication of presentation of these papers. The aim is to increase the authors' achievements (!). Several quoted references have no real relation to the presented papers and only make them more sophisticated. By such a method of presentation of the papers the reviewers are discouraged to analyze the text, even though the conclusions should attract more criticism.
5. It is obvious, that the authors aimed at artificial increase of the number of their published papers, also by changing their titles.
6. It is not appropriate that the institutions supplying funds for research do accept such tests and modelling exercises that bring no appreciable results. It is possible to propose many other useless subjects for research, e.g. unreinforced concrete elements subjected to torsion that may be tested and modelled, without any expectation of useful or interesting results.
7. In my opinion, it is a mistake from the part of both Editorial Committees of ACE and of ACEE to participate in increasing the number of such papers with tutorials in fracture mechanics and finite element method in the journals having Civil Engineering on their cover pages.

Professor Andrzej M. Brandt
Institute of Fundamental Technological Research, PAS

RESPONSE TO THE FORMAL REMARKS OF PROF. BRANDT

ANSWER:

The paper sent to the journal „Architecture, Civil Engineering, Environment” ACEE on 24.04.2012 was written on request of the chief editor Prof. A. Ajdukiewicz, who had proposed it for publication after my presentation at the conference “Analytical Models and New Concepts in Concrete and Masonry Structures” held in Cracow on 13-15.06.2011. It included solely the finite element modelling results presented during the conference according to suggestions of Prof. A. Ajdukiewicz. The long-prepared paper for the journal ACE (sent on 22.04.2012) included a significantly larger amount of FE results, among others it showed in addition the effect of the aggregate stiffness, width of interfacial zones between the aggregate and cement matrix, notch size in beams and characteristic length of micro-structure on a fracture process in concrete beams under loading. In turn, the results presented in the paper for the journal “Maritime Engineering and Geotechnics”, 2/2010 were our preliminary FE outcomes and they differed significantly from those published in the journal ACE (the results qualitatively and quantitatively varied after the elaboration of the calculation accuracy).

I do not completely agree with calling our paper as the ‘autoplagerism’ for the following reasons:

- 1) The both papers deal with an innovative and important topic at the world-scale which was numerically investigated for the first time in Poland. They were accepted for publications without critical comments by referees that confirmed their high research level.
- 2) All FE calculations in the both publications were carried out by the papers’ authors.
- 3) The paper sent to the journal ACEE included exactly the calculation results presented by myself during the conference in Cracow (I have sent it on request of the chief editor Prof. A. Ajdukiewicz). Therefore I have expected that the paper would have a form of post-conference proceedings. I have not signed a copyright transfer form and a statement on the results’ originality and ethics in the research activity for the editorial board of the both journals that is required in all journals from the list “ISI Web of Knowledge JCR”. In this form, the publication in the journal ACEE has not been certainly the ‘autoplagerism’.

In the paper “Plagiarism and autoplagerism”, Infos, Bureau of Parliament Analyses, 16, 108, 2011, Dr. S. Stanisławska-Kloc writes: ‘In spite of negative opinions on the autoplagerism phenomenon, it has to be outlined that the autoplagerism has nothing to do with the plagiarism. Until the author does not make a copyright transfer to other subjects, e.g. a publishing house, he can repeatedly spread and diffuse his work using different ways and forms. Beyond the cases of a repeat listing of the same publication in the index of the research output, an activity making the own work available may not be forbidden and negative remarks may not be made concerning such an activity.

A freedom of the research performance or artistic activity should not limit the one-time work's access.'

In turn, J. Sieńczyło-Chlabicz and J Banasiuk write in the paper „Concept and meaning of the autoplagiarism phenomenon in the research output”, State and Law, 2012, nr. 3: ‘An autoplagiarism can occur if:

- The author replicates fragments of his earlier work in the successive work,
- The author puts in his successive work fragments (slightly changed) of his earlier one,
- The author repeatedly publishes the same work at the large time distance from his first publication (e.g. 3 years) without information about it (through that the readers may be misinformed with respect to the work originality).

The autoplagiarism is not equivalent with the plagiarism since nobody plagiarizes someone else's work or their fragments. The occurrence of one of these points does not mean that the autoplagiarism has been committed. For the autoplagiarism commitment, some dishonest multiplications of works have to occur, e.g. copyright law infringement,.....

...a special precaution should be taken into account in view of accusations concerning the autoplagiarism (if the accusation is not justified, one can be accused by the slander). In the case of being accused of the autoplagiarism, one has to remember about the existence of a creative freedom, and the author by himself in accordance with the copyright law decides how he wants to take advantage of his work and how he wants to spread it. A too much attention paid to the autoplagiarism concept may cause a brake in the research development that would not be a desired event.'

RESPONSE TO THE REMARKS OF PROF. A. M. BRANDT RELATED TO THE CONTENTS OF THE PAPERS

ANSWER 1:

The mechanics of initiation, formation and propagation of strain localization and cracks is similar in plain concrete and reinforced concrete beams. Testing and modelling of plain concrete beams at the meso-scale are both innovative and of great importance and have the cognitive and practical meaning. They allow for better understanding and describing the fundamental phenomena occurring in concrete, i.e. strain localization and cracks which take place at the aggregate level and affect immensely the global concrete behaviour (in addition their results may be applied in solving practical problems). It should be noted that the titles of two well-known world scientific conferences „International Conference on Fracture Mechanics of Concrete and Concrete Structures FraMCoS” and „Computational Modelling of Concrete and Concrete Structures EURO-C” do not include the name ‘reinforced concrete’.

Theoretical and experimental investigations of concrete at the mesoscopic level are nowadays conducted in several research centres all over the world. This fact is confirmed by the presence of many research papers on this topic in reputable journals JCR. Some of them (in number of 15) were listed in our paper sent to the journal ACE.

ANSWER 2:

The remark is not clear and not validated. Why does Prof. Brandt say that our modelling results are useless if similar investigations are performed in many different research centres. I think that our modelling results of concrete at the meso-scale are very interesting and cognitive. They show an immense effect of micro-structure components in numbers on the concrete behaviour. They were accepted for publication without any critical comments by reviewers who were certainly the experts in the problems dealt with. The lack of critical remarks confirms their high research level.

ANSWER 3:

The conclusions are not absolutely trivial since they describe quantitatively the effect of micro-structure components on the concrete behaviour during fracture. Thus, they have a large practical meaning for understanding the concrete fracture mechanics and behaviour of concrete and reinforced concrete elements under loading. The remark is both useless and non-content-wise.

ANSWER 4:

Both papers have been accepted for publication without critical comments by referees that is rare in particular in the journal ACE. This fact unquestionably confirms a high research level of our works. It was not certainly our aim to increase the number of our papers through a publication in the journal ACEE, since it does not affect my research output and the output of my co-workers. According to the Department of Science and High Education (MNiSW), the most important and desired elements of the research output are publications and citations (the so-called Hirsch's index) in journals from the list "ISI Web of Knowledge JCR". The paper in the journal ACEE was prepared not to gain 4 ministry scientific points, but to satisfy a request of Prof. Ajdukiewicz. In 2012, our research group took part in publications of 9 research papers in renowned journals from the list "ISI Web of Knowledge JCR" which are significantly higher estimated in a ministry scientific point table. My Hirsch's index equals 15 and the number of citations (without self-citations) is more than 500. A remark of Prof. Brandt about the content similarity of papers written by our research group is unilateral and absolutely false. Our group deals with many different research problems within concrete mechanics, bulk solid mechanics, granular body mechanics, composite panels, building physics and steel, reinforced concrete and geotechnical structures.

ANSWER 5:

The explanation was given in the answer to the remark 4. Every Year I gain about 100 ministry scientific points. Thus, his objection that the 2-point publication (4/2=2 points) is needed for my scientific career is absurd.

ANSWER 6:

The research funds for scientific teams are accepted based on reviews of specialists and not of outside persons. I think that a unilateral judgement of one researcher should not affect and limit the development of the polish research.

Our group has published several papers in renowned journals” ISI Web of Knowledge JCR” and in monographs of the Springer publisher with respect to many various problems of plain and reinforced concrete. Our published publications indicate a high scientific level of our research works. Our knowledge has already found the application in several industrial expert opinions.

ANSWER 7:

I do not understand the role taken over by Prof. Brandt. A decision made by the chief editor based on reviews provided by scientific specialists decides if the paper is accepted for publication or not – certainly not made by outside persons.

Summarized, I feel indignant about the accusations by Prof. Brandt with respect to the so-called ‘autoplgiarism’ and by his authoritative (but false) remarks to our papers’ content, in particular by taking into account that he is not the expert on concrete fracture modelling.

Professot Jacek Tejehman
Gdansk University of Technology

FINAL REPLY ADDRESSED TO ACE

In his long letter full of entirely irrelevant paragraphes Professor J.Tejehman tries to justify his autoplgiarisme by such an argument:

... both papers deal with an innovative and important topic...; no comments!

Back to the facts: the first paper was integrally copied into the second one with minor additions and both papers were submitted simultaneously to two different journals, against existing rules (in ACE point 4). Publication of such papers satifies the definition of autoplgiarisme.

Prof. JT expressed huge self satisfaction after his achievements and these fragments of his letter are rather ridiculous. Nevertheless, even from the top of his knowledge, there is no reason to refuse me any right to discuss critically his papers.

By the way, my publications on modelling of fracture in concrete appeared approximately thirty years earlier than his.

As to the meritum, I am criticising sophisticated calculations of unrealistic objects and publishing such 'treatises' in engineering journals, and this is my good privilege as a reader.

Andrzej M. Brandt

FINAL REPLY

It seems that Prof. A.M. Brandt has not understood my explanations, in particular those on a definition of the 'auto-plagiarism' and reasons for sending my paper to the journal ACEE. A further discussion with malicious and personal remarks by someone, who does not follow the current research state in modelling of the concrete behaviour at meso-scale, is in my opinion useless. Researchers should deal with scientific problems and co-operate together, but not to disturb others in their activity.

Jacek Tejchman