

12-1-1989

## Reflections on Attending Three Contributed Paper Sessions on Humanistic Mathematics in Phoenix 1989

Peter Flusser  
*Kansas Wesleyan College*

Follow this and additional works at: <http://scholarship.claremont.edu/hmnj>

 Part of the [Logic and Foundations of Mathematics Commons](#), and the [Mathematics Commons](#)

---

### Recommended Citation

Flusser, Peter (1989) "Reflections on Attending Three Contributed Paper Sessions on Humanistic Mathematics in Phoenix 1989," *Humanistic Mathematics Network Journal*: Iss. 4, Article 9.  
Available at: <http://scholarship.claremont.edu/hmnj/vol1/iss4/9>

This Article is brought to you for free and open access by the Journals at Claremont at Scholarship @ Claremont. It has been accepted for inclusion in Humanistic Mathematics Network Journal by an authorized administrator of Scholarship @ Claremont. For more information, please contact [scholarship@cuc.claremont.edu](mailto:scholarship@cuc.claremont.edu).

## REFLECTIONS

*on attending three contributed paper sessions on humanistic mathematics in Phoenix 1989*

Peter Flusser  
Kansas Wesleyan College  
Salina, KS 67401

The term "Humanistic Mathematics" is a redundancy, isn't it, just like "Humanistic Literature" or "Humanistic Philosophy" would be. So why do we need a special interest group devoted to "Humanistic Mathematics"? We have dehumanized mathematics, and some of us are trying to reverse that trend. It is high time that we did so.

How have we dehumanized mathematics? Let me count some ways:

- We present mathematics to our students as a rigid set of rules.
- We tell our students that mathematics stands here before us, a set of eternal, changeless truths that must be memorized and regurgitated on examinations.
- We tell our students that all mathematical problems have exactly one answer which can always be found by following a mechanical system of rules.
- We show our students only those problems that are of no interest to them whatsoever.
- We insist that mathematicians never get emotionally involved with their work.
- We tell our students that mathematics can only be done by highly talented, wise and clever people such as we are and such as they can never hope to be.
- We tell our students that mathematics does not appeal to the senses.
- The "average educated man in the street" and "average" public school teacher believes all these things we tell our students, and they teach these things to their children and their students who believe these things even before we tell it to them.
- And so most people dislike mathematics, because who would not dislike a subject about which all these things are true?

All speakers seem to agree: Mathematics is important in society. I have no quarrel with that statement if you modify "society" to read "our society". Does it follow that mathematics is important to all societies?

Some speakers say "Yes!" They point to tally sticks and other elementary computing devices found in even the most primitive societies as evidence that mathematical activities are universal. But other speakers point out that mathematics is not merely symbol manipulation. Is the presence of a tally stick evidence of the presence of genuine mathematical activity merely evidence of symbol manipulation of a kind more primitive than that engaged in by a student doing long division with paper and pencil?

To continue: Is the Rhind Papyrus a mathematics book or merely a set of algorithms? Was A'h-mose', or the person whose original work A'h-mose' copied, a true mathematician or one of the first dehumanizers of mathematics? Or perhaps mathematics was not a humanistic discipline in those days; perhaps mathematics became a humanistic discipline only in the 19th Century after the discovery of non-Euclidean Geometry, non-commutative algebras and the discovery of paradoxes in the very foundation of mathematics forced us to approach our discipline in a different manner.

If mathematics is so important to all societies why did the Chinese abandon mathematical research after making such an auspicious beginning in number theory as the discovery of the Chinese Remainder Theorem?

If mathematics is not important in all societies but only in some of them, could we then characterize each type of society and distinguish between the characteristics of each type? Could we then, perhaps, make valid and meaningful statements about the nature of the human condition in each of these different types of societies?

A final question: Is mathematics a humanistic discipline only in a small subset of those societies in which it is important? In other words, are those bad things about mathematics which we still teach our students true in certain parts of the world, and were they true in the western world at some time in the recent past?

If that were true we would not be trying to reverse a bad trend of our own making. It would be correct to say that we are trying to introduce a new and exciting element into our discipline, one which we have long felt was there but which the rest of the world has yet to discover.