

# Re: Review of Mueckenheims book.

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- *From:* "Dik T. Winter" <[Dik.Winter@xxxxxx](mailto:Dik.Winter@xxxxxx)>
  - *Date:* Thu, 1 Mar 2007 02:38:09 GMT
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In article <1172674257.469668.135280@xx>  
mueckenh@xxxxxxxxxxxxxxxxxxxx writes:

On 26 Feb., 04:14, "Dik T. Winter" <[Dik.Win...@xxxxxx](mailto:Dik.Win...@xxxxxx)> wrote:

- > Definition: The cross-section  $C(n)$  of a finite tree  $T(n)$  is the number
- >  $2^n$  of nodes of its last level  $L(n)$ .

Obfuscations abound. So  $C(n)$  is the number of nodes that are at distance  $n$  from the root.

Correct, namely the maximum of paths which can be separated in this tree  $T(n)$ .

Yes, as each path terminates at such a node. You again add obfuscation.

- > The cross section  $C(\infty)$  of the union of finite trees  $U(T(n))$  is  $C(\infty)$
- >  $= |2^\omega| = \aleph_0$ .

Proof, please. And how do you *define*  $C(\infty)$ ?

I do not define  $C(\infty)$ . We are talking about the union of finite trees  
It does not contain a Level  $n = \infty$  or tree  $T(\infty)$ .

How can you state things about things you do not define? You state  $C(\infty)$   
as being something, but you do not define  $C(\infty)$ ?

You defined  $C(n)$  as the  
number in the last level  $L(n)$  of  $T(n)$ . What is the last level of  $T(\infty)$ ?  
So what is  $C(\infty)$ ?

If you look at the proof of the harmonic series, there are  $\aleph_0$

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pairs of parentheses.

What are you babbling about. You used  $C(\infty)$  and I ask what it is. But you refrain to answer. I will skip the following, as it is irrelevant as long as you refuse to answer my question.

Then you see that the cross section of the union tree  $U(T(n)) = T(\infty)$  is  $C(\infty) = \aleph_0$ .

What can I see if you even do not give a definition of your terminology?

- > Proof: Left as an exercise to the reader. [Hint: Consider the proof of
- > the countability of the set of all unit fractions required to prove
- > the divergence of the harmonic series:
- >  $1/2 + (1/3 + 1/4) + (1/5 + 1/6 + 1/7 + 1/8) \dots$
- > or consider the cardinal number of nodes of the union of finite
- > trees.]

Is this a proof? For the divergence of the harmonic series, countability plays no role. It is just a lack of proof.

You misunderstood. There is the saying that  $\aleph_0$  parentheses result in  $\aleph_0$  terms in parentheses although for every finite segment of  $n$  pairs of parentheses we have  $2^n$  terms in the last pair of parentheses.

I can say nothing about such a saying. This is beyond what is understandable.

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