

they mention various metaphors and ramble about various concerns (Re: Kuratowski Ordered Pair)

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- *From:* galathaea <galathaea@xxxxxxxxxx>
 - *Date:* Fri, 21 Dec 2007 13:22:08 -0800 (PST)
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On Dec 20, 5:56 pm, MoeBlee <jazzm...@xxxxxxxxxxxxx> wrote:

On Dec 20, 5:16 pm, galathaea <galath...@xxxxxxxxxx> wrote:

On Dec 20, 3:19 pm, MoeBlee <jazzm...@xxxxxxxxxxxxx> wrote:

Please, ante up already. Please say EXACTLY what the Kuratowski definition was INTENDED to do but does not do.

the intent is not necessary to an objection

The poster claimed that there is some intent of the definition that the definition fails. I'd just like to know what intent the poster has in mind. I mentioned the intentions of the definition (and a nice discussion is given in Moschavakis's book), and indeed we prove that those intentions are fulfilled.

but is it really that hard to see what might be their issues?

They mention various metaphors and ramble about various concerns.

i like this phrase so i will probably steal it

it is such a perfect description of the usenetiverse and the rest of our neobabelopolis

But
the only thing substantive has been the concern of defining n -tuples

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without going through numbers. I addressed that.

i agree you addressed it
you addressed it again in this paragraph i am responding too

that doesn't imply your addressing it contributed significantly to any
issues

it is regularly pointed out in the foundations of math
that the concept of 2 cannot be defined
without some presumption that the parser already has some bivalence

whether in two neighboring symbols
or two different symbols
or some other embedding of the concept innately

pairs

this is not true of higher naturals

: I guess I cannot quite understand what people mean by an
: "unordered pair." I can understand not knowing the order of a
: pair and I can understand superposition of all possible orders.
: But, the connectivity of a pair without order is
: incomprehensible to me.

Yes!!! Yes! Yes and yes!!!

You start by challenging me to understand vague and metaphorically
motivated objections to some formally worked out mathematics and then
you turn around to endorse NOT understanding a perfectly simple and
intuitive formal definition. Rich.

i'm probably not taking my meds properly or something

what i was trying to state
was that i do not see why it is so difficult to understand
the various positions on ordered pairs mention by a few of the
posters

i see ordered pairs as being the primitive notion
and unordered pairs as being a construction from ordered pairs
by taking classes of the equivalency quotient $(a,b) \sim (b,a)$

mitch mentions this possibility as superposition

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i see the ordered pair as intuitive
which appears to be backed by child psychology and neurobiology
action schemas
parsers
and other foundational mechanics for symbology

i don't see the unordered pair as intuitive
and definitely not primitive

it seems a specialised construction to me

I once got into a discussion with my topology teacher about which was
more
primary. He argued that ordered pairs required more definition,
whereas my
point was that on all conceptual levels I could identify (visual,
auditory,
etc.), the ordering seemed to follow most naturally from the input,
and the
act of "unordering" seemed a latter abstraction.

$a \rightarrow b$ is much more useful evolutionarily than, say, $a = b$.
when presented with a collection of "things"
objects, impressions, ..
we appear to identify the collection through some ordering process

we select an object and pattern recognise it
then another
and so on
a temporal series of conceptual isolations

the same goes for counting

we _choose_ one
then another

these orderings aren't a priori or associated innately with the
objects
and they might change any time an identification is done

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but the ordering seems integral to the conceptualisation

we read symbols in some order
giving them some connective mereology as a data structure
something we can iterate through

Meanwhile, I see no need for set theory to emulate your personal
opinions in metaphysics. I don't take set theory to even be about such
metaphysical concerns.

then you are a firmly in the camp that foundations are meaningless

i have never understood that position
i've always felt foundations were there
to describe the physical process called mathematics
and like other scientific descriptions
requires evidentiary metrics over models

you see?
i'm completely whacko
a k00k of the lowest caliber!

i can't even understand meaningless things!

this is how turing machines work

The informal notion of a Turing machine is formalized in formal set
theory with tuples.

and many other theories with their own tuples

and then we look at set theory
which takes collections as unordered
and a pair (a, b)
becomes {a, {a, b}}?

No, it does not "become". There's just a definition. We don't need to
impose metaphysics of 'becoming'.

you're right
sloppy wording

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"is interpreted in the model"

and it still assumes the ordering for parsing
but claims an unordered semantics?

I don't know what you mean by 'unordered semantics'.

me neither!

well
i understand my point on the semantics
i just don't understand the meaning in the semantics itself
but that might just confuse you more

remember this: i'm not sane so there is no reason to pursue what i say

when a language mangles a natural concept so horribly
there is plenty to object

You're welcome to offer an alternative formalization that satisfies
the intent (the theorems I mentioned). Would your alternative be as
simple as the Kuratowski definition?

i wouldn't give them definitions
since that is not the type of thing one normally does with
primitives

but i would give them a syntax

here is a nice pair

(a,b)

another nice one

—

a

—

b

—

maybe something like

$^a.b^b$

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with the cute bunny earz?

no matter the intent

No, we wish for the defintion to facilitate certain mathematics.

some do not consider definition the appropriate direction to go here

galathaea: prankster, fablist, magician, liar

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