Re: CANTOR's theorem

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- *From*: Virgil <ITSnetNOTcom#virgil@xxxxxxxxxxx>
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In article <1117027159.228720.35740@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>,
mueckenh@xxxxxxxxxxxxxxxxx wrote:

> Virgil wrote:
>
> > >
> > > You always apply the same old argument.
>
> > When one has done it right, there is no need of change.
>
> Not if the consistency of the theory is in question. Two correct proofs
> in an incorrect theory may lead to contradictory results.
>
> > Since (N union {}) = N, my previous proof is still valid.
>
> Define a bijective mapping from {1, a} on P({1}) = {{}, {1}}. a is a
> symbol but _not_ a number (a could probably be { }). There are two
> bijections possible. In both cases the set of all _numbers_ which are
> non−generators under any bijective mapping belongs to the image.
>
> f: 1 −−> {1} and a −−> { } with M(f) = { },
>
> g: 1 −−> { } and a −−> {1} with M(g) = {1}.
>
> Although there is no problem with non−equivalent sets, Hessenberg's
> condition cannot be satisfied. The set M of all numbers which are
> non−generators cannot be mapped by a number although M is in the image
> of both the possible mappings. The set {M(f), m, f} is an impossible
> set. Hessenberg's proof does not show, in this example, the
> non−surjectivity of the mapping.

What your example above shows is that the restriction of either of your
functions to {1} −> P({1}) cannot be surjections, which is what we have
been saying all along.
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- ***Follow−Ups***: