

Re: too much information!

Source: <http://sci.tech-archive.net/Archive/sci.math/2005-01/4347.html>

mensanator_at_aol.compost

Date: 01/14/05

Date: 14 Jan 2005 13:28:37 -0800

jmfahciv@aol.com wrote:

> *In article <1105647068.240038.96810@c13g2000cwb.googlegroups.com>*,
> *"mensanator@aol.compost" <mensanator@aol.com> wrote:*

>>

> > *jmfahciv@aol.com* wrote:

> > > *In article <20050112093819.25685.00000061@mb-m26.aol.com>*,
> > > *mensanator@aol.compost (Mensanator) wrote:*

> > > > *Subject: Re: too much information!*

> > > > *From: jmfahciv@aol.com*

> > > > *Date: 1/12/05 5:46 AM Central Standard Time*

> > > > *Message-id: <PqCdnWhR7560hXjcRVn-hQ@rcn.net>*

> > > >

> > > > *In article*

> > > > *<1105468858.967035.96660@z14g2000cwz.googlegroups.com>*,

> > > > *"mensanator@aol.compost" <mensanator@aol.com> wrote:*

> > > > >

> > > > > *jmfahciv@aol.com* wrote:

> > > > > > *In article*

> > > > > > *<1105420562.691975.269220@c13g2000cwb.googlegroups.com>*,

> > > > > > *"mensanator@aol.compost" <mensanator@aol.com> wrote:*

> > > > > > >

> > > > > > > *>Androcles wrote:*

> > > > > > > *<snip>*

> > > > > > >

> > > > > > > > *7) Pixels on a computer screen. 16,000,000 colors for each*

> > > > > > > > *>pixel.*

> > > > > > > > > *> How many different pictures are possible?*

> > > > > > > > > *> Is it more or less than a google?*

> > > > > > > > >

> > > > > > > > > *>For a 640x480 screen, it's 10²²19433, slightly larger than*

a

> > > > > > > > > *>googol.*

> > > > > > > > > *> But none of it is information.*

> > > > > > > > >

> > > > > > > > > *>I wouldn't say none. A lot of it would be useless. But just*

> > > > > > > > > *>because*

> > > > > > > > > *>you can't tell the difference between a picture of a polar bear*

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in

> > >>> *a blizzard and the inside of a ping pong ball doesn't mean the
> > >>> picture of the inside of a ping pong ball isn't an accurate
> > >>> representation.*

> > >>

> > >> *It isn't an accurate representation.*

> > >

> > > *Sure it is. A 640x480x24 array of binary 1s is an accurate
> > > representation of a uniform white object.*

> > >

> > >> *The picture is only in your imagination.*

> > >

> > > *No, there are two files on my hard drive called*

> > >

> > > *polar_bear_in_blizzard.jpg*

> > > *ping_pong_ball_interior.jpg*

> > >

> > > *If the pictures are copied to another disk and renamed*

> > >

> > > *image1.jpg*

> > > *image2.jpg*

> > >

> > > *then the context of those images has been lost*

> > >

> > > *No, it hasn't lost context because there was no context
> > > to lose. "A rose is a rose by any other name."*

> >

> > *Only if the second file is a copy of the first. If there were
> > two distinct uniform white objects, each object's picture will
> > be a file of all binary 1s and each file is a distinct piece
> > of information even though the content is identical.*

>

> *You are working with digital devices here. There is no difference
> between the contents of the two files. Thus a program, person,
> or device cannot distinguish between the two. If the task was
> to find the file, all searches would stop at the first one in
> the directory list.*

So what? There may be other tasks that don't need to distinguish the files based on content.

> >

> > *Would you want your bank to delete your account because the
> > balance matches that of another customer?*

>

> *This is precisely why each account has a unique number _as
> an integral part of its data_.*

And when it's not possible to put that distinction inside the file, you put it outside the file. For example:

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polar_bear_in_blizzard.jpg
ping_pong_ball_interior.jpg

I've run rings around you logically.

>
> *Why do you think the post office looks at the last line of*
> *an address label first? You clearly need to learn a lot more*
> *about sorting and binning.*

Been there, done that. My first job was with
Cummins–Allison. We made check reader/sorters for
the banking industry.

> *Get thee a box of IBM cards, punch data, find a sorter,*
> *collator and merger,*

Luxury. I had to work on those goddamn paper tags
they used to use in clothing stores. Punch card readers
were a doddle. You haven't lived 'til you've debugged
a tag reader.

> *then play with all*
> *machines, noting all the different arrangement of cards you*
> *can have.*

Suppose (as is more likely) all you have is the
punch cards. You could recover the information off the
cards by manual inspection or, by reverse engineering,
build a reader.

Now reverse it, i.e. you have a sorter, collator and
merger but no cards. Now what do you do? Data without
context is better than context without data.

> >
> >>
> >> > .. *and they*
> >> > *become useless. But they remain valid pictures.*
> >>
> >> *They are not valid picture_s_. It is one, and only one, picture.*
> >
> > *Only if they were created invalidly. If I opened Windows Paint*
> > *and saved the default white canvas and then _claimed_ it was*
> > *a photo of the interior of a ping pong ball, then you could*
> > *claim it was an invalid picture.*
>
> *It is indistinguishable from white noise;*

Actually, white noise wouldn't look anything like that.
It would look more like the snow you see on your TV when

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it's tuned to an unused channel.

> *thus it's garbage data. Now there are uses for such things,*

Aha!

> *but recognition based on its contents is not one of them.*

But you originally said "none of it is information".
So if there are uses (aside from content recognition),
then there is, in fact, *_some_* information.

"And when I say there's none,
I mean there is a certain amount."
– Monty Python

> >
> >*It may be that no two objects are _exactly_ identical, but they*
> >*don't have to be to take the same picture. The camera has a finite*
> >*resolution and light sensitivity, so two distinct objects may*
> >*appear identical to the camera.*
>
> *Take two pictures of the same thing. Do a binary FILCOM of the*
> *two files. You can test your ideas. Another word you can*
> *probably google to find out more is granularity (at least,*
> *that was one of the cybercruds used waybackwhen).*
>
> >
> >>
> >> > *.. The information*
> >> >*has not been lost, only the context in which it was used has.*
> >>
> >> *There is only one piece of information with this picture and that*
> >> *is the color to paint the TTY screen.*
> >
> >*Now you're starting to sound like Androcles. It's one piece of*
> >*information PER PIXEL. And there are 307200 pixels.*
>
> *No.*

"No" you're not talking like Androcles or "No" there aren't
307200 pixels?

> *Now you are talking about how to display the bits that*
> *are stored. Your pixel map will not necessarily produce the*
> *same display on my TTY as it does on yours.*

But it doesn't matter whether it looks the same.
You said there one piece of information – color.
That implies that all screen sizes have the same
look (even if the look is wrong). But that's

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incorrect. If the TTY screen has fewer pixels than the picture, the picture will be cropped. The pixel count is information in addition to the color.

>
> > .. *It is*
> > *irrelevant to this discussion that every one of those 307200*
> > *pieces of information is identical.*
>
> *I give up.*

That's to be expected when you're arguing from a position of weakness.

> *I hate cute.*

And yet, you say such cute things as "GIGO is still GIGO no matter what you name it."

> *And you know not to play the cutseys from our last discussion.*

Was that the one where you called me an asshole for making light of your paranoia about usenet trolls?

Maybe I enjoy being abused by Mistress BAH.

>
> <*snip*>
>
> */BAH*
>
> *Subtract a hundred and four for e-mail.*