

## **Part Four: Organizational Processes**

### **15 Google, The Digital Age, and Your Memory**

01:25:46:05 --:--:--:--

- This is The Rundown.

I'm Hari Sreenivasan.

01:25:48:08 --:--:--:--

If you've ever noticed

01:25:49:14 --:--:--:--

that you don't bother  
remembering things

01:25:51:14 --:--:--:--

that you can find  
on the internet,

01:25:53:04 --:--:--:--

you aren't alone.

01:25:54:05 --:--:--:--

And there's a new study  
in the journal Science

01:25:56:09 --:--:--:--

that delves into that  
and much more.

01:25:58:02 --:--:--:--

The title of the paper is called  
Google Effects on Memory:

01:26:00:20 --:--:--:--

Cognitive consequences  
of having information

01:26:02:27 --:--:--:--

at our fingertips.

01:26:08:02 --:--:--:--

We're joined by lead author  
Betsy Sparrow,

01:26:10:03 --:--:--:--

a psychologist  
from Columbia University.

01:26:12:04 --:--:--:--

Thanks for being with us.

01:26:13:13 --:--:--:--

- Thank you.

01:26:14:07 --:--:--:--

- So what are the kind  
of key findings here?

01:26:16:07 --:--:--:--

You're essentially telling me

01:26:17:23 --:--:--:--

that I am able to take  
the space

01:26:19:09 --:--:--:--

where I used  
to remember things,

01:26:20:28 --:--:--:--

and now I'm remembering how  
to find the information better?

01:26:26:23 --:--:--:--

- The overall findings are

01:26:28:03 --:--:--:--

that when people  
don't know things,

01:26:29:26 --:--:--:--

they tend to think  
about the computer first.

01:26:31:29 --:--:--:--

They think about the place  
to find it.

01:26:33:23 --:--:--:--

When people expect  
to have information

01:26:35:20 --:--:--:--

accessible to them later,

01:26:37:00 --:--:--:--

they don't remember it as well  
as when they don't expect to.

01:26:39:18 --:--:--:--

So they do locate it externally  
instead of internally.

01:26:42:03 --:--:--:--

And then finally, yes,

01:26:43:09 --:--:--:--

that people tend to prioritize  
where to find things

01:26:45:20 --:--:--:--

as opposed  
to the things themselves,

01:26:47:14 --:--:--:--

which actually I think  
is pretty adaptive.

01:26:53:17 --:--:--:--

- so what kinds of information  
are we essentially keeping

01:26:56:05 --:--:--:--

on the internet and not keeping  
in our brains anymore?

01:26:58:19 --:--:--:--

- My guess is mostly  
the information

01:27:00:14 --:--:--:--

that we don't have  
to use in our day-to-day lives,

01:27:02:22 --:--:--:--

the things that we  
aren't experts in--

01:27:04:18 --:--:--:--

so the things that we aren't

01:27:05:26 --:--:--:--

the transactive memory source  
for other people.

01:27:08:04 --:--:--:--

- So what is transactive memory?

01:27:09:21 --:--:--:--

- so transactive memory  
is this idea

01:27:11:14 --:--:--:--  
that we have  
external memory systems

01:27:13:08 --:--:--:--  
that are available to us,

01:27:14:17 --:--:--:--  
and typically,  
or historically,

01:27:16:07 --:--:--:--  
they were described  
as other people.

01:27:18:01 --:--:--:--  
So there would be other people  
in our lives,

01:27:20:02 --:--:--:--  
say, in our office  
or our home life,

01:27:21:24 --:--:--:--  
who would know specific things,

01:27:23:11 --:--:--:--  
and so we would go to them

01:27:24:19 --:--:--:--  
when we needed to know  
the answers to those things,

01:27:26:29 --:--:--:--  
but we wouldn't bother

01:27:28:03 --:--:--:--  
to encode  
the information internally.

01:27:30:00 --:--:--:--  
We would just know  
what they knew

01:27:31:19 --:--:--:--  
and know to go to them  
to find out.

01:27:33:08 --:--:--:--

- So, you know, people  
have been complaining

01:27:35:11 --:--:--:--

about this idea ever since  
we had the written word.

01:27:37:21 --:--:--:--

I mean, there  
were philosophers saying,

01:27:39:19 --:--:--:--

"Oh, my God,  
we're gonna forget everything.

01:27:41:22 --:--:--:--

"The oral tradition  
is where it's at.

01:27:43:16 --:--:--:--

We really need  
to remember this."

01:27:45:06 --:--:--:--

Is this kind of  
that next evolution?

01:27:46:29 --:--:--:--

Are we essentially  
taking our memories

01:27:48:26 --:--:--:--

and putting them outside  
of our brains?

01:27:50:23 --:--:--:--

Not memories, I should say,  
but huge chunks of our brain

01:27:53:07 --:--:--:--

and putting them outside?

01:27:54:17 --:~:~:~:~:~

- I don't think so,  
necessarily.

01:27:56:06 --:~:~:~:~:~

I think, you know, that there

may be more information

01:27:58:17 --:--:--  
that we look up quickly online

01:28:00:04 --:--:--  
when we could oftentimes,  
you know,

01:28:01:27 --:--:--  
go back inside our own memories  
to find it.

01:28:03:27 --:--:--  
We're just, you know,  
in a hurry.

01:28:05:16 --:--:--  
So the stuff is still there,

01:28:06:28 --:--:--  
it's just we're not accessing it  
as much as we used to.

01:28:09:10 --:--:--  
And I also think it's not  
all that different

01:28:11:11 --:--:--  
from the transactive memory  
sources that we've always used.

01:28:14:02 --:--:--  
It's just more salient  
to people

01:28:15:21 --:--:--  
that we're using it this way.

01:28:17:04 --:--:--  
So people don't really think  
about the other people

01:28:19:15 --:--:--  
in their lives  
that they're using,

01:28:21:07 --:--:--  
you know,  
as external memory sources,

01:28:23:03 --:--:--:--  
but the computer  
is really--

01:28:24:18 --:--:--:--  
you know, everyone realizes  
that they're doing this.

01:28:27:02 --:--:--:--  
You know, it resonates  
with everybody.

01:28:28:29 --:--:--:--  
So it seems that much more,  
I guess, scary in some ways,

01:28:31:09 --:--:--:--  
you know, the idea  
that we're locating everything

01:28:33:19 --:--:--:--  
that we learn outside  
of ourselves,

01:28:35:12 --:--:--:--  
and so does that have  
any kind of impact

01:28:37:08 --:--:--:--  
on our ability to remember  
things in general?

01:28:39:12 --:--:--:--  
I don't think that's the case,

01:28:40:27 --:--:--:--  
but I actually don't have data  
on that.

01:28:42:23 --:--:--:--  
- It leads me  
to this question of,

01:28:44:12 --:--:--:--  
if we're using this transactive  
memory online so much,

01:28:46:26 --:--:--:--  
what happens on those moments

01:28:48:06 --:--:--:--  
when we're not connected  
to the internet?

01:28:50:06 --:--:--:--  
Do we just get dumber?

01:28:51:11 --:--:--:--  
- [laughs]

01:28:52:03 --:--:--:--  
Well, like I said,  
it depends.

01:28:53:19 --:--:--:--  
It depends on how much you want

01:28:55:04 --:--:--:--  
to know the answer  
to the question.

01:28:56:26 --:--:--:--  
So if it's something  
that's really crucial

01:28:58:27 --:--:--:--  
to something you're doing  
at the time,

01:29:00:25 --:--:--:--  
you'll find some other way,  
right?

01:29:02:17 --:--:--:--  
You'll call up the person  
who might know.

01:29:04:15 --:--:--:--  
You know, you'll actually trek  
over to the library

01:29:06:25 --:--:--:--  
to look up the information.

01:29:08:07 --:--:--:--  
I mean, it really depends.

01:29:09:17 --:--:--:--  
This is actually one



of the things

01:29:11:07 --:--:--:--  
my husband and I  
were talking about.

01:29:13:00 --:--:--:--  
You know, we said,  
what does happen

01:29:14:22 --:--:--:--  
if you just want to know  
the name of an actress?

01:29:16:26 --:--:--:--  
That's not particularly  
important, you know?

01:29:19:00 --:--:--:--  
And so we thought,

01:29:20:01 --:--:--:--  
well, you know,  
you could kind of do

01:29:21:18 --:--:--:--  
this kind of daydreaming thing

01:29:23:04 --:--:--:--  
where you kind of go back  
in your mind and think about,

01:29:25:16 --:--:--:--  
all right, you know,  
where was I

01:29:27:03 --:--:--:--  
when I saw this person?

01:29:28:09 --:--:--:--  
Was it in black and white?

01:29:29:18 --:--:--:--  
Was it in color?

01:29:30:16 --:--:--:--  
You know, was she older,  
was she younger?

01:29:32:14 --:--:--:--

And then sometimes you might come to the answer

01:29:34:19 --:--:--:--  
and then other times  
you might not

01:29:36:09 --:--:--:--  
and you probably just forget  
about it.

01:29:38:03 --:--:--:--  
- Okay and we  
should also mention

01:29:39:22 --:--:--:--  
that you had help  
from Jenny Liu

01:29:41:09 --:--:--:--  
of the University  
of Wisconsin Madison

01:29:43:06 --:--:--:  
and Daniel Wegner  
of Harvard University.

01:29:45:06 --:--:--  
But Betsy Sparrow,  
the lead author

01:29:46:28 --:--:--:--  
and psychologist  
from Columbia University,

01:29:49:02 --:--:--:--  
thanks so much for joining us.

01:29:50:17 --:--:--:--  
- Thank you.

01:29:51:09 --:--:--:--  
- This is The Rundown.

01:29:52:14 --:--:--:--  
I'm Hari Sreenivasan.  
Stay with us.