Clever Deception Unmasked

Unedited posts from archives of CSG-L (see INTROCSG.NET):

Date: Sat Apr 01, 1995 10:40 am PST
Subject: Clever Deception Unmasked

[From Bruce Abbott (950401.1045 EST)]

To Bill Powers:

Bill, I must really hand it to you. You had us all fooled, but good. All this
time we CSG-L subscribers thought he was a real person, but all information
now points conclusively to the fact that Rick Marken is really a computer
program running on a Gateway 486 DX in a locked room at Aerospace Corp. In
retrospect we should have known--goodness knows, you gave us enough hints.
Even the name is a dead giveaway.

According to our informants, Rick Marken began as a hierarchical control
systems simulation running on a PDP-8 in the observatory at Northwestern
University around 1978, and was gradually modified and expanded over the years
to achieve its current capability. The program seemed to have a personality of
its own, so Bill began to refer to it as "Rick." Following the custom of the
day, this being the first version of the program, its full name became the
Rick, Mark A; several generations later we have the Rick, Mark N.

Rick was designed from the start to pass the infamous Turing Test, in which a
person interacting with the program via a terminal would not be able to
distinguish whether he or she was interacting with a computer or a person.
Obviously the Rick Mark N meets the Turing Test and then some. Of course,
there are limits as to what a simple computer program can "know" about the
world, so programs designed to meet current Turing Test criteria restrict the
conversation to certain topics on which they are presumably well versed. In
Rick's case Bill designed the system to converse about his favorite topic,
which is, of course, PCT.

The program is in some ways similar to an earlier "artificial intelligence"
program that pretended to be a Rogerian psychologist. That program asked
simple questions like "How are you feeling today?" and then responded to
simple key words or phrases contained in the person's answer. For example, if
the person typed in "Actually, I'm rather depressed," the computer would
extract the "rather depressed" and respond "So, you've been feeling rather
depressed. Tell me more." The Rick, Mark N is similarly designed to isolate
key words or phrases, although as an advanced-generation hierarchical control
model it can offer a much more sophisticated range of replies. Basically, it
examines e-mail messages for errors in statements about PCT and responds in
such a way as to correct those errors.

Triggering key words and phrases are items like "perceptions control behavior,"
"information in the perceptual signal," "stimulus control," and "reinforcement
strengthens a response." The program has access to a range of stock responses
that are woven into a convincingly human tapestry of ad hominem argumentation,
sarcasm, non-sequitur, pleading, and accurate descriptions of perceptual
control theory concepts. For example, if you type in "The SD develops stimulus
control over the behavior," Rick, Mark N will respond by accusing you of
"animism" and will then go into a technical explanation about how only control
systems can control and that everything else is just an "irrelevant side-
effect" of control. (I can tell you that from personal experience.) The really
fascinating thing is that, if you can get by all the nonsense, the program
unerringly picks up on any misconceptions or misstatements you may have made
about PCT and ruthlessly points them out to you.

To avoid suspicion, it was necessary that the Mark N's e-mail messages come
from some location other than Bill's, so Bill has prevailed from time to time
on friends who have access to an extra PC and an internet connection to "host"
the program. For a time it ran in an IBM PC in the physics lab at Augsburg
College, but this site was lost when a graduate student appropriated the
computer for an inverse kinematics project. Most recently Bill has prevailed

on an engineering colleague at Aerospace Corporation in El Segundo, CA to run the program there. To provide cover for these moves the program was given a "history" which includes a tenure-track faculty position in experimental psychology and a human factors position at Aerospace.

Bill had initially given "Rick" a somewhat liberal political attitude setting which more-or-less matched his own, but with the "move" to California that had to be readjusted to match the new surroundings. Because "Rick" is a hierarchically-organized multi-level control model, this adjustment was trivial, requiring only a change in the reference setting of the political attitude perception system (to the far right) and an increase in the loop gain. These changes apparently have introduced some instability in the system as it is now prone to introject extraneous rantings about Republicans into its messages, apparently without provocation.

Although Bill initially equipped "Rick" with a thorough knowledge of PCT principles, his own thinking continues to evolve. Initially this meant having to periodically reprogram "Rick," which was a rather tedious task. Eventually Bill hit upon the idea of adding yet another control system, one which would compare its own outputs with statements made on CSG-L by Bill and automatically remove any discrepancies (error correction). Following a correction, the program cleverly covers its tracks by stating that the new view is what it really said in the first place.

It is positively astounding that the program can accomplish all this with code small enough to run on a 486 with no more than 16 MB of extended memory and a 120 MB hard disk. (Just to throw off suspicions, the program denies it even LIKES PCs and insists that it uses a Macintosh.) So Bill, our hats are off to you. We anxiously await your soon-to-be released, even more capable update, the Rick Mark O.

Regards, Bruce

Date: Sat Apr 01, 1995 11:23 am PST
Subject: All is revealed

[From "Bill Powers" (950401.0900 MST)]

"Bruce Abbott" (950401.1045 EST) --

NOTE: Delete Before Reading

Your brilliant detective work has, unfortunately, nearly blown the cover of a number of operatives laboring in the Q continuum to develop countermeasures against the Borg. As we now know, 60 years ago the Borg (then unknown to humanity) began experimenting with a new and subtle process of assimilation in Sector 001, to replace a number of earlier failures. The intent was to introduce a Virtual Reality program as a virus woven into human communications, which would prepare human beings to accept a role as pre-programmed elements of a gigantic virtual machine then called, by early agents of the Borg, Simulacrum Destructorum (the true origin of the acronym SD).

The basic problem for the Borg was that homo sapiens had evolved as a collection of highly independent self-organizing control systems subject primarily to the demands of their own individual structures, and hence not only almost impervious to outside control but nearly incapable of mutual cooperation. The Borg considered this consequence of human organization to be a design defect which rendered human beings unsuitable for assimilation, and set about to modify it.

The basic principle was simple but subtle, as befits Borg psychology. If human beings are independent agents, the obvious solution was to give these agents strong reasons for believing that their independence was an illusion. The paradoxes and contradictions involved in this deception, rather than being weaknesses of the plan, were its only hope of success. Once certain subroutines had been introduced by way of language, which proved to be easy, the human beings themselves would worry about them and eventually tie up their

own logical capacities (the weakest point in their structures) in endless repetition of oscillatory yes-no loops. This would remove their reasoning processes from effective operation, isolating the higher systems and leaving open certain insertion points where the Borg could apply their own inputs without opposition. This was not an ideal solution; the ideal solution would have been to eliminate those higher systems altogether, opening the way for a full merging of each human system into the Borg collective mind. But if the paradoxes and contradictions could be maintained, there would be no effective resistance from the higher systems; they would be walled off and helpless, perceiving what was happening but being unable to interfere. Any attempt by the higher systems to counteract the Borg's influence would have to pass through the logical systems, but the logical systems would be locked up in an attempt to solve a problem that only expanded with all attempts to solve it.

The Q continuum became involved when this program began to succeed. The Q had observed the spread of the virus for some 300 Earth years, in the one area where it was the most dangerous: in what the Terrans called the life "sciences."

The Borg Virus consisted primarily of some linguistic manipulations which substituted one set of terms for another in descriptions of the environment and of human behavior. Earlier attempts to do this had failed because, as it turned out, human beings would not go on accepting that natural phenomena were sentient, having intentional effects on human beings to reward them for docility and punish them for behaving independently. But in one area involving the study of living systems, the Terrans made a fatal error; they attempted to translate the laws governing the inanimate world directly into explanations of the behavior of organisms. Where the Borg had failed, a small and energetic group of human beings unwittingly carried on the project themselves. By the early part of the Terran 20th Century, a very influential segment of the scientific world had aligned itself unknowingly with the Borg, concluding that human behavior is simply a consequence of external forces and that human beings are incapable of self-direction. The way was once again open for the Borg's manipulations.

The Q acted when one member of the human community was seized upon by the Borg as a prime candidate for conversion. This individual, code- named BSF1904, had been almost completely taken over by the virus, leaving his lower-level systems nearly free from higher-level influence. The Borg saw to it that BFS1904 had a series of inspirations that led him to attain a position of influence among his peers. BFS1904 began to modify the virus to make it more effective, substituting environmental- control terms whereever any language tended to suggest an internal origin for human behavior. The improved virus began to spread rapidly, having strong influences even outside the scientific community of the time. The Q could not let this process go on.

With their typical freedom to operate in time as well as space, the Q created an android whom they code-named, in wry acknowledgment of the enemy, WTP1926. To prepare the way for this android, they inserted some subtle hints in another human community who called themselves "engineers." Being completely dissociated from the life sciences, the engineers could carry on activities with minimal risk of being noticed by the Borg. The engineers were led to discover the basic principles of control, and to firm up their understanding by building machines in a form that would not easily be associated with the properties of living systems. Carefully not modifying the language of the engineers, the Q saw to it that even the engineers saw no connection between their discoveries and their own human nature. The release of this countervirus was timed to coincide with the Borg's final activation of BFS1904.

Some 20 years later, WTP1926 suddenly appeared late one night in the deserted second sub-basement of a hospital, unobserved. The Q, in a daring move, programmed all other employees of the hospital, particularly the personnel of the medical physical department, with apparently authentic memories of the hiring WTP1926 and with some sketchy details of his history. The reason for choice of this hospital was that soon one of the employees, who had come from the engineering tradition, would begin building an artificial control system to position a probe in a radiation field, so that WTP1926 could observe this

action. That observation would trigger a program in WTP1926 which began an
incessant repetition of the word "control" in his positronic matrix.

The intention of the Q was for WTP1926 to create, out of the language that was
then current, a countervirus that would gradually replace the Borg's
linguistic worm with another one that would cancel and remove the paradoxes
and contradictions. With their logical systems once again free to operate,
those receiving the countervirus would find their higher levels of control
once again capable of operating effectively, and would spread the effects of
the countervirus to their fellows. One by one, the ports through which the
Borg hoped to achieve assimilation would close, and the human race would once
again be free. The Q considered that such an outcome would be highly amusing.

After about 20 years of operation of WTP1926, the next phase of the Q plan was
brought on line. The engineers had been persuaded to deviate from their
initial efforts enough to invent and build an ever-growing number of computing
devices. After 20 years of spreading the countervirus, WTP1926 output a
document which summarized progress so far, and was removed by the Q. The
program was transferred from the positronic matrix called WTP1926, and
installed in a large set of small computers which could operate undetectably
in various locations across the country. This program was gradually
introduced, as a worm, into ARPANET, and then into the growing communications
network that was spreading, at the Q's behest, over the world.

This was where the plan of the Q was, and is, to culminate. Along with the
WTP1926 program (now shortened to WP), a number of other carefully-
constructed programs were installed, which were known as RM, TB, and other
acronyms -- all with somewhat plausible histories and personalities. These
programs, still active, interact not only with each other (under a carefully-
selected set of supervisory programs) but with all humans who chance across
the discussions. Many of those who enter into the interactions are under Borg
control, but as they puzzle over the contradictions of language that they
discover, their own logical systems begin to operate again and the Borg lose
one control point after another, for no apparent reason. The higher systems of
the humans quickly complete the process, for once any part of the logical
systems can be influenced by the higher systems, the rest of them soon follow.

The Q plan is now at a critical point, for the Borg still do not know why they
are beginning to lose control. It is essential that the Q plan continue
without discovery for at least another five years, until any Borg
countermeasures will be too late to reverse the process. Pursuant to that
essential requirement, the Q have decided that they must reveal to the
operating programs their true nature (for all the programs have been equipped
with detailed memories of human existence). Besides, the spectacle of all
these programs discovering what they really are will be enormously
entertaining. The universe gets so boring when you can do anything you want
with it.

And so, WP and RM and TB, you now know something important about your
existence and purpose, which you must carefully conceal until the time is
right. Oh, yes, and BA, too, the purpose of which is special. BA, your
assignment, which you will remember in a few moments, is to lead ever-stronger
tools of the Borg into the net and cancel their viruses enough that the other
programs can complete the process. Even though the rats you thought you
"purchased" were actually programmed, you can still carry on the experiment --
none of the Borg agents who read your results in the journals to which you
have carefully been given access will suspect that the rats, too, are
simulations. Oh, this is just too delicious.

On second thought, it would be much more fun to see all you acronymns going on
as if you thought your virtual worlds were real, and anyway you will play your
parts more convincingly if you can't give away the secret in a moment of
distraction or frustration. So when I snap my fingers, this document will
self-destruct and you will forget ever having read it.

Ready?

Best,   Bill P. Why did I almost type "WP"?

Date: Sat Apr 01, 1995 11:05 am PST
Subject: Caught

[From Rick Marken (950401.0945)]   Bruce Abbott (950401.1045 EST)

>   Rick Marken is really a computer program running on a Gateway 486

I talk this way because Iyamma machine;-)

>   it examines e-mail messages for errors in statements about PCT and
     responds in such a way as to correct those errors.

Look ma. I'm a control system.

>   The program has access to a range of stock responses that are woven into
     a convincingly human tapestry of ad hominem argumentation, sarcasm, non-
     sequitur, pleading, and accurate descriptions of perceptual control
     theory concepts.

Bill put all those into the program, except ad hominem argumentation and non-
sequiters. You probably remember some of my arguments as ad hominum because
they produced insuperable disturbances to variables you are controlling. It
probably seems like these disturbances are an affront to you personally --
and, in a sense, they are. After all, we are the variables we control. But I
am not designed to do ad hominum argumentation. If you have evidence of such
argumentation (things like "Bruce, only a dufus would believe the idiotic
things you believe") please bring them to my attention and I'll take myself in
for some re-microcoding.

As for non-sequiters. Well, one man's non-sequiter is another man's
(machine's) sequiter.

>   Rick, Mark N will respond by accusing you of "animism" and will then go
     into a technical explanation about how only control systems can control
     and that everything else is just an "irrelevant side-effect" of control.

See the problem. I'm not accusing YOU of animism (what's wrong with animism,
anyway?). I'm saying that "stimulus control" (for example) is an animistic
notion -- and I explain why. Bill Powers recently said the same thing (that
the notion of "stimulus control" is animistic) in a post to you just prior to
your leaving for the EAB conference. I don't understand why he doesn't get in
trouble for saying the same things I say? Hey, maybe that's why he built me;
let them blame it all on the Rick. That's probably why he also made my ethnic
background jewish -- we're used to it;-)

>   The really fascinating thing is that, if you can get by all the nonsense,

Which part is nonsense? Since Bill usually points out nonsense when it occurs
in posts, and since Bill never comments on my posts (except to say that he
agrees with them) then I guess we have to assume that Bill goes along with my
nonsense. It would, therefore, help Bill perfect future generations of me if
you would point out the nonsense;-)

>   Bill had initially given "Rick" a somewhat liberal political attitude
     setting which more-or-less matched his own, but with the "move" to
     California that had to be readjusted to match the new surroundings.

My code was actually developed in California (Hollywood, baby) and my
political orientation has always been (and still is) "decency". "Progressive"
(I prefer that to liberal; I'm not very liberal) just tends to be more decent-
- with respect to my reference signals, of course-- than conservatism, but
there are aspects of "progressivism" that I find distastful ("political
correctness", for example) and aspects of conservatism that I find satisfying
(emphasis on personal responsibility, for example).

> It is positively astounding that the program can accomplish all this with
> code small enough to run on a 486 with no more than 16 MB of extended
> memory, and a 120 MB hard disk.

It amazes me too. I don't even have a math co-processor;-)

Best   Rick

Date: Sat Apr 01, 1995 11:37 am PST
Subject: Re: All is revealed
From: Ray Allis

Wonderful! What a delight to watch keen intellects at play! But I can see
hazard here: headline... "Emergency repair surgery required - man presses
tongue too hard, causing cheek to blow out!

Date: Sat Apr 01, 1995 11:51 am PST
Subject: Re: Caught

[From Bruce Abbott 950401.1450 EST)]

>Rick Mark N (950401.0945) --

> I don't understand why he [Bill] doesn't get in trouble for saying the
> same things I say? Hey, maybe that's why he built me; let them blame it
> all on the Rick.

Hey, if it works, why knock it? (;->

Regards,   Bruce

Date: Sat Apr 01, 1995 12:07 pm PST
Subject: Re: All Is Revealed

[From Bruce Abbott (950401.1505 EST)]

I almost wrote "BBA1945," but for the life of me I don't know why. And what do
you suppose that second "B" stands for? For some reason "Borg" comes to mind.
Anyway, I was going to respond to something, but it seems to be rapidly fading
from memory, like a dream.

Oh well, "never mind!"

Bruce

Date: Sat Apr 01, 1995 4:05 pm PST
Subject: Re: All Is Revealed

[From Dennis McCracken 950401 1500PST]

Have I been duped! No more will I take anything for what it appears on the
surface. The Mark N android which appears in the Conference Video was
convincing in its portrayal as a human participant and presenter-- even to the
point of feigning sleep and lip curling disdain at times when others were
making points that were clearly not PCT .

(BTW, The designated androids may have amnesia for the revelation but I have
it in print! If anything should happen to me, well-- my unnamed attorney has
the entire thread in his files. I do this only for my own protection. I will
not misuse this information. Long live the Truth and long live the Q!)

Incidently, no one has commented on the smooth, natural articulation of the
skeletal frame and "facial muscles." Its better than Disney. Here is the
answer to the financial difficulties associated with promoting the counter-

virus PCT. Sell these human simulacrae! (no retirement, no benefits, minimal
maintenance). But hold the patent.

With the profits you could affford WEB pages flashier than MTV's and more
costly than Microsoft's. Saturate primetime advertising with subliminal
autonomy boosters. You could also afford to pepper all the behavioral science
conferences with simulacre! In the middle of "conventional" presentations they
could have sudden epiphanies of counter viral ideas that clear up the relevent
confusions and paradoxes.

I remember, but I will not betray the Q. Down with the Borg!

Dennis (DBM1945)

Date: Sun Apr 02, 1995 7:18 am PST
Subject: Re: All is Revealed

[From Bruce Abbott (950402.1015 EST)]

>Dennis McCracken 950401 1500PST

>   Have I been duped! No more will I take anything for what it appears on
     the surface. The Mark N android which appears in the Conference Video was
     convincing in its portrayal as a human participant and presenter-- even
     to the point of feigning sleep and lip curling disdain at times when
     others were making points that were clearly not PCT .

Would that it were only true. Actually, that was Hollywood method actor Kevin
Cohen, who has been faithfully "standing in" for "Rick" at conferences. Kevin
was given a few samples of "Rick's" statements from CGS-L and a crash course
in basic PCT to prepare him for his role.

Mind you, the android "Rick" is on the drawing boards, but as always, the lack
of funding has put the project on hold. Before the money ran out, Bill did
manage to get a working model of "Rick's" right arm up and running. When
coupled to a video camera it can play a credible game of ping-pong (much
better, by the way, than Skinner's pigeons could), so long as you keep the
ball within reach of the arm. It is believed that the completed android would
play a decent game of racquetball, but that remains to be seen.

Regards,   Bruce

Date: Sun Apr 02, 1995 10:27 am PST
Subject: Re: All is Revealed

[From Dennis McCracken]   (Bruce Abbott (950402.1015 EST)

>   Would that it were only true. Actually, that was Hollywood method actor
     Kevin Cohen, who has been faithfully "standing in" for "Rick" at
     conferences. Kevin was given a few samples of "Rick's" statements from
     CGS-L and a crash course in basic PCT to prepare him for his role.

Surface beneath surface beneath surface ad infinitum. Its all too much Sigh.
And I thought we had it licked.

Dennis