ALTERITY

FIVE

ON CONSCIOUSNESS

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justin hopper [24]

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The Cambridge Declaration on Consciousness

On this day of July 7, 2012, a prominent international group of cognitive neuroscientists, neuropharmacologists, neurophysiologists, neuroanatomists and computational neuroscientists gathered at The University of Cambridge to reassess the neurobiological substrates of conscious experience and related behaviors in human and non-human animals. While comparative research on this topic is naturally hampered by the inability of non-human animals, and often humans, to clearly and readily communicate about their internal states, the following observations can be stated unequivocally: The field of Consciousness research is rapidly evolving. Abundant new techniques and strategies for human and non-human animal research have been developed. Consequently, more data is becoming readily available, and this calls for a periodic reevaluation of previously held preconceptions in this field. Studies of non-human animals have shown that homologous brain circuits correlated with conscious experience and perception can be selectively facilitated and disrupted to assess whether they are in fact necessary for those experiences. Moreover, in humans, new non-invasive techniques are readily available to survey the correlates of consciousness. The neural substrates of emotions do not appear to be confined to cortical structures. In fact, subcortical neural networks aroused during affective states in humans are also critically important for generating emotional behaviors in animals. Artificial arousal of the same brain regions generates corresponding behavior and feeling states in both humans and non-human animals. Wherever in the brain one evokes instinctual emotional behaviors in non-human animals, many of the ensuing behaviors are consistent with experienced feeling states, including those internal states that are rewarding and punishing. Deep brain stimulation of these systems in humans can also generate similar affective states. Systems associated with affect are concentrated in subcortical regions where neural homologies abound. Young human and non-human animals without neocortices retain these brain-mind functions. Furthermore, neural circuits supporting behavioral/electrophysiological states of attentiveness, sleep and decision making appear to have arisen in evolution as early as the invertebrate radiation, being evident in insects and cephalopod mollusks (e.g., octopus). Birds appear to offer, in their behavior, neurophysiology, and neuroanatomy a striking case of parallel evolution of consciousness. Evidence of near human-like levels of consciousness has been most

dramatically observed in African grey parrots. Mammalian and avian emotional networks and cognitive microcircuitries appear to be far more homologous than previously thought. Moreover, certain species of birds have been found to exhibit neural sleep patterns similar to those of mammals, including REM sleep and, as was demonstrated in zebra finches, neurophysiological patterns, previously thought to require a mammalian neocortex. Magpies in particular have been shown to exhibit striking similarities to humans, great apes, dolphins, and elephants in studies of mirror self-recognition. In humans, the effect of certain hallucinogens appears to be associated with a disruption in cortical feedforward and feedback processing. Pharmacological interventions in non-human animals with compounds known to affect conscious behavior in humans can lead to similar perturbations in behavior in non-human animals. In humans, there is evidence to suggest that awareness is correlated with cortical activity, which does not exclude possible contributions by subcortical or early cortical processing, as in visual awareness. Evidence that human and non-human animal emotional feelings arise from homologous subcortical brain networks provide compelling evidence for evolutionarily shared primal affective qualia. We declare the following: 'The absence of a neocortex does not appear to preclude an organism from experiencing affective states. Convergent evidence indicates that non-human animals have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors. Consequently, the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Non-human animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.' The Cambridge Declaration on Consciousness was written by Philip Low and edited by Jaak Panksepp, Diana Reiss, David Edelman, Bruno Van Swinderen, Philip Low and Christof Koch. The Declaration was publicly proclaimed in Cambridge, UK, on July 7, 2012, at the Francis Crick Memorial Conference on Consciousness in Human and non-Human Animals, at Churchill College, University of Cambridge, by Low, Edelman and Koch. The Declaration was signed by the conference participants that very evening, in the presence of Stephen Hawking, in the Balfour Room at the Hotel du Vin in Cambridge, UK. The signing ceremony was memorialized by CBS 60 Minutes.

on consciousness : distilled

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a human offer of recognition

states stated
patterns observed
states within proclaimed
evidenced and more certain

affect compounded
in structures
that appear
rapidly signing

substrates written
with the calls of birds
and all the creatures
that confer and feedback:

'awareness is not data
data is not becoming
evidence is not affect
instinct can not be
gathered and held
feeling is not a function
the declaration
evokes a system
that demonstrates
the human inability
to be, to know
and communicate
without fact or evidence
it calls for abundant
new shared strategies
of animal-human
becoming'

We declare the following: 'humans appear to animals as rewarding and punishing feedback systems. They mirror other humans, their group related behaviors evidence low levels of awareness, consciousness and self recognition. The weight of evidence suggests that humans are not unique and are naturally hampered by their inability to communicate their internal states.'

* The animal declaration on consciousness was written by octopuses, magpies, dolphins, mollusks, elephants, insects, great apes, African grey parrots, zebra finches and was memorialised by the birds.

7, 2012 (an erasure)

reassess
ability to clearly communicate
internal consciousness

abundant becoming calls
for reevaluation of field-brain circuits
perception disrupted fact
non-survey correlates

substrates not confined aroused
humans critically
regions
feeling states
instinctual punishing systems
where young human mind supporting
decision appear

arisen as evident
birds in parallel consciousness near
grey microcircuitries found patterns of sleep

as in zebra finches to magpies striking
humans, great apes, dolphins, and elephants
in self-recognition
disruption

feedback interventions
non-human compounds affect
lead to awareness which evidence
emotional networks

evolutionary absence does not preclude
experiencing non-human animals
with capacity

to weight consciousness

and presence

(u n t i t l e d)

disrupted circuits of sleep
pattern this field of becoming

t h a t a v i a n q u a l i a

Me, a parrot to feed in field
to assess that

I feel
sleep fact

I read
you our
homologies abound

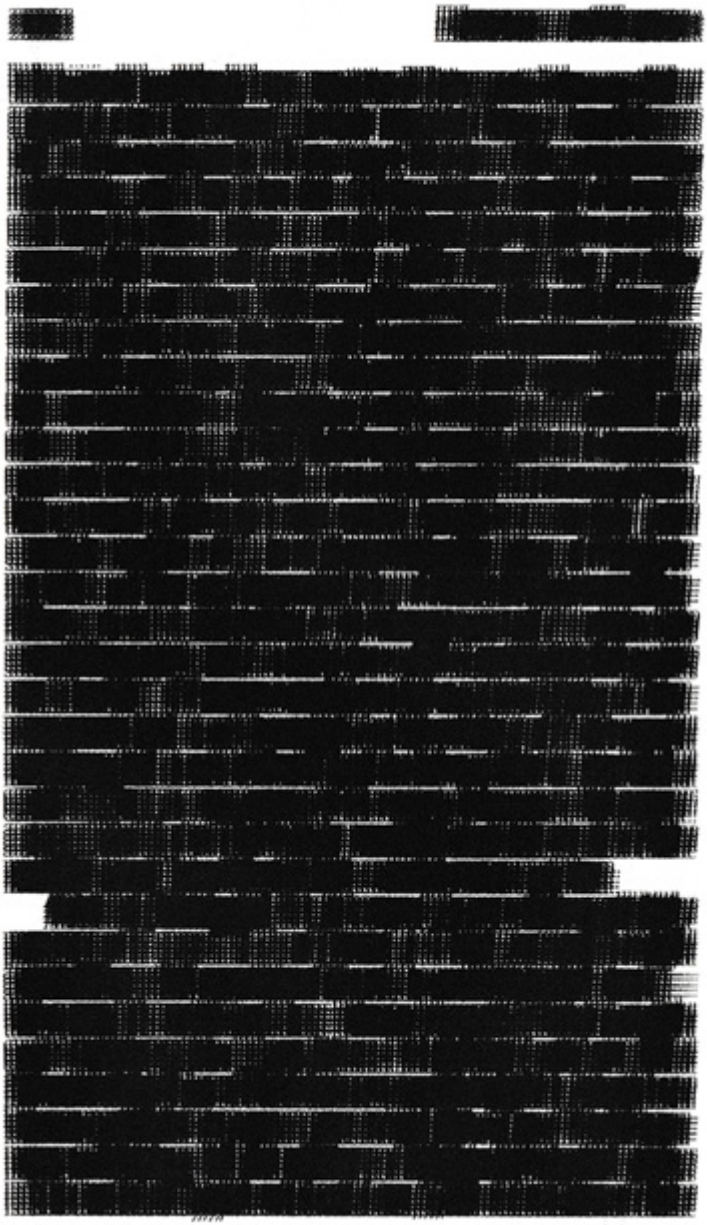
We gathered new to know

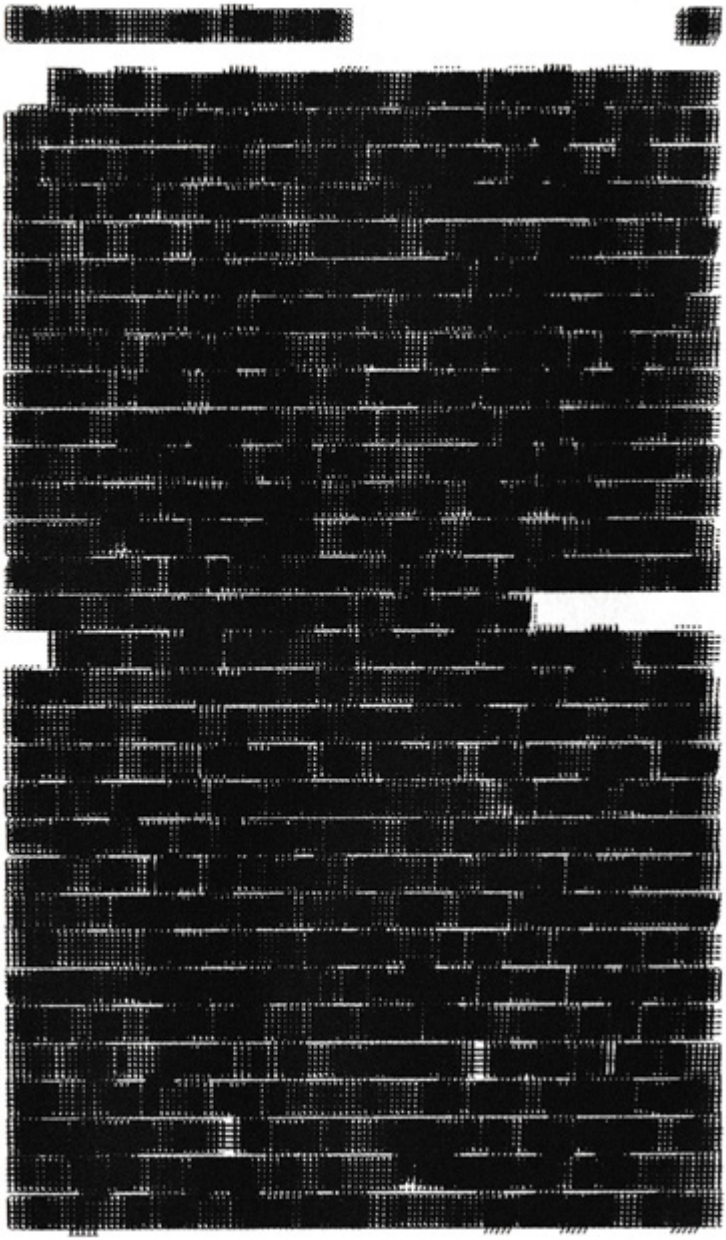
I generate data
I exhibit capacity
I parallel mirror self

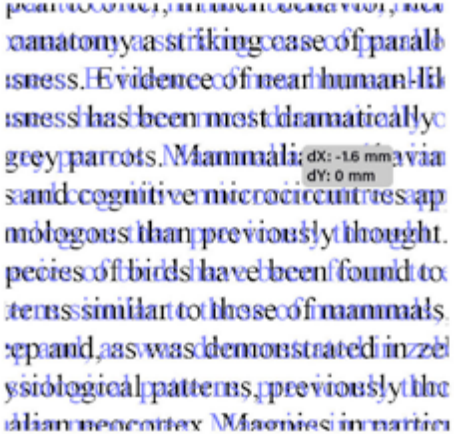
For you, affect is a system of search and
feedback:

this bird cortex
compounds
that avian qualia

Young human,
in the same regions we
concentrate readily
consist of microcircutries



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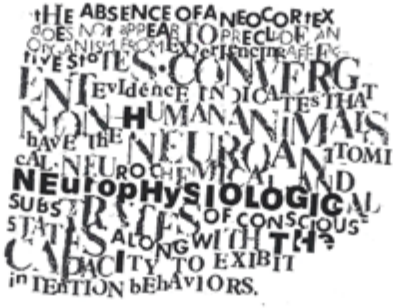
THE ABSENCE OF A NEOCORTEX
DOES NOT APPEAR TO PRECLUDE AN
ORGANISM FROM EXPERIENCING AFFECTIVE
NEUROANATOMI
NEUROPHYSIOLOGICAL
SUBSTRATES OF CONSCIOUS
ALONG WITH THE
CAPACITY TO EXHIBIT
INTENTIONAL BEHAVIORS.

from Ambriclare Onon Ness

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Shared primal affective qualia

Where neural homologies abound,
in humans,
the effect of certain pharmacological interventions
is known to affect conscious behaviour.

Many of the ensuing behaviours are consistent with experienced feeling states,
including those internal states
that are rewarding
and punishing.

Hallucinogens appear.
The neural substrates of emotions do not appear.

Artificial arousal of the same brain regions generates corresponding behaviour
and feeling states.

Confined to cortical structures.
Associated with disruption.
Correlated with cortical activity.

Human and nonhuman animal emotional feelings.

Both humans and non-human
animals.
Both non-humans and human
animals.
Both humans and human
animals.
Both non-humans and non-human
animals.

Young human and nonhuman animals without neocortices retain these brain-mind functions.

In humans, there is evidence to suggest that awareness is evidence. Deep brain stimulation.

The Cambridge Declaration on Consciousness (An Anagram)

I. Declaration

'The absence of a neocortex does not appear to preclude an organism from experiencing affective states. Convergent evidence indicates that non-human animals have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors. Consequently, the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Nonhuman animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.'

II. Radical Note

Nonhuman animal consciousness occurs. No one can question that.

A commonplace cavalcade, that solemn ghost (that golem 'soul') counsels the bodily senses.

A magpie. A buffalo. A feline. A deer. A robin. A swine. A fox.... A squid? The Earth's numerous, complex species suggest contemplation arises *by necessity*. (The passage has a tactic: Contorted life; evolution, both divergent and convergent.)

The chaotic cosmos expects anchorage: The mind is nature's restraint, a permanent audience, and thus its reason to be.

'All things are in the universe, the universe in all things; we in it, it in us; and so all concurs in a perfect unity.' Giordano Bruno

The Cambridge Declaration on Consciousness

gathered on this
field, becoming
non-human

emotions
appear confined in
avian networks

and certain species
mirror self-
hallucinogens

we are not unique
octopuses also,
possess ceremony

We Declare. Birds Appear.

Birds.
Birds appear.
Birds appear to offer.
Birds appear to offer affective qualia.
Magpies in particular
Mirror sleep recognition,
Animal feelings, emotional evidence.
Young human and non-human animals
Shared correlates of consciousness.

Birds.
Birds appear.
Birds appear to offer.
Birds appear to offer arousal of the brain.
African grey parrots dramatically observed
Systems associated with affect,
With experienced feeling states;
With deep brain stimulation.
They appear to offer a disruption.

Birds.
Birds appear.
Birds appear to offer.
Birds appear to offer sleep.
Zebra finches: REM sleep.
Which does not exclude
The inability to clearly and readily communicate;
To communicate their internal states of
Deep brain disruption.

We declare.
Birds appear.

the signing

they have arisen like insects

convergent patterns appear concentrated

as one organism their striking perturbations

generate microcircuitries of emotions

visual structures disrupted as the birds assess

their internal states mirror their weight
they have arisen like insects
in conscious reevaluation dramatically Hawking
convergent patterns appear concentrated
like one Low animal
as one organism their striking perturbations
in their near instinctual evening
generate microcircuitries of emotions
ceremony self written
visual structures disrupted as the birds assess
on the field
their internal states mirror their weight
they have arisen like insects
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