

Living
In the
ANTI-Material
World

"If we accept the view of complete symmetry between positive and negative electric charge so far as concerns the fundamental laws of Nature, we must regard it rather as an accident that the Earth (and presumably the whole solar system) contains a preponderance of negative electrons and positive protons. It is quite possible that for some of the stars it is the other way about, these stars being built up mainly of positrons and negative protons."

***(from Paul Dirac's Nobel Lecture
December 12, 1933)***



*In a tiny corner of this
(or perhaps some other)
Universe...*

*In a tiny corner of this
(or perhaps some other)
Universe...*

...there is a planet.

*In a tiny corner of this
(or perhaps some other)
Universe...*

...there is a planet.

A strange world.



*In a tiny corner of this
(or perhaps some other)
Universe...*

...there is a planet.

A strange world.

***AN ANTIMATTER
PLANET***



THE PLANET *ADANACIA*



Adanacia
is very much like our
Earth
except that



Adanacia
is very much like our
Earth

except that
everything,
all matter,
is composed of
antimatter.



***The Adanacians
do not refer to
the matter
on their world as
“antimatter”.***



***The Adanacians
do not refer to
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on their world as
“antimatter”.***

Why should they?



***The Adanacians
do not refer to
the matter
on their world as
“antimatter”.***

Why should they?

***They call it
matter.***



*It is YOU who are
made of antimatter
as far as we are
concerned.*





*Let us assume that
we can both
communicate with the
planet's inhabitants,
and even observe them
and their surroundings.*



BUT,
that we cannot interact
with them or their
surroundings
PHYSICALLY.



*How could we know for
certain that this planet
(and everything on it)
was composed of
antimatter?*



*Is there anything we
could ask the
Adanacians?*



*Is there anything they
could do in order to
demonstrate for us that
their planet is composed
of what we call
antimatter?*

*(the Adanacians have a
knowledge of science and a
technology that is at least
equivalent to our own).*

Discuss!



Oh, and by the way...



*...there IS a way to
for you to determine
whether we live in a
world made of what
you call antimatter...*



*If you are
interested, see the
Extension Topic
"Through The
Looking Glass".*

