

EINSTEIN'S EQUIVALENCE PRINCIPLE



STARRING AS

COSMIC-MEDICINE

Einstein's equivalence principle: the simplest possible, mathematical idea underpinning & relating everything in unity.

by Ehrengard Hohbach & George Hohbach, February 10, 2017

Based on our experiences so far, we have reason to be confident that nature is the realization of the simplest conceivable mathematical concept.

Albert Einstein

(On the Method of Theoretical Physics, June, 10, 1933, own translation)

Albert Einstein's HAPPIEST THOUGHT was his groundbreaking EQUIVALENCE PRINCIPLE. This is the simplest possible mathematical idea: It reveals scientifically that total opposites—to our sensory perception—are, in fact, the same, identical, i.e. SYMMETRIC.

Thanks to his amazing ability to think in abstract, purely mathematical simplicity, Einstein realized via his revolutionary equivalence principle that:

1. BEING AT REST (BEING ADDED UP, A UNIT)

&

2. ANY KIND OF MOTION (MORE, EXPANSION)

are the same, identical, i.e. symmetric

AND that

1. GRAVITY (ADDING UP, WARPING SPACE-TIME, FORMING A UNIT)

&

2. ACCELERATION (MORE, GROWING SPEED, EXPANSION)

are the same, identical, i.e. symmetric.

In short, this magically informs us that:

1.ADDED UP/ADDING UP = 2. MORE

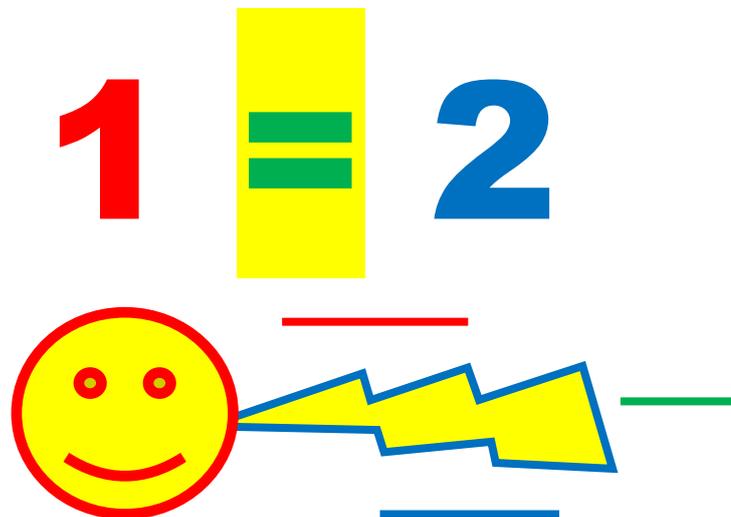
ADDED UP stands for **BEING A UNIT**. **ADDING UP** forms a **UNIT** (the added up result). So, **ADDING UP** as a process also includes the **RESULT (UNITY, BEING ADDED UP)**. Consequently, we can reduce the 1st term of the above equation to just **ADDING UP** (as it encompasses being Added Up, too), and hence—as the 2nd term **MORE** has no limit and equals **INFINITY**—we get the mindboggling, amazing equation of sameness, i.e. **most beautiful SYMMETRY**:

1.ADDING UP = 2. INFINITY

or shorter:

UNITY(#1) = INFINITY(#2)

or most concise:



Essentially, this boils down to just UNITY or #1, or even **NO-THING**, because **UNITY**—being **SYMMETRIC**—knows no distinctions, so there is **NO-THING**.

... the grand aim of all science (...) is to cover the greatest number of empirical facts by logical deduction from the smallest number of hypotheses or axioms.

Albert Einstein

(Ideas and Opinions, a collection of writings by Albert Einstein, 1982, p.282)

The unbelievable fact is, that this definition of **SYMMETRY/UNITY/NO-THING**—which Einstein discovered with his stunning Happiest Thought, his most elegant equivalence principle—tells us as the simplest possible mathematical idea at the bottom of reality why we have 3-dimensional space including time as the 4th dimension:

1. **UNITY(#1)** stands for **ADDING UP**, and so **#1 (UNITY) + #2 (INFINITY)** generates the result of **1 + 2 = 3**.
2. **INFINITY(#2)** stands for **COUNTING** (endless MORE as endless single pieces or digits/numbers), and as **INFINITY (COUNTING) = UNITY (ADDING UP)**, we can say (count) **1, 2, 3** instead of **1 + 2 = 3**. Both ways of getting to **#3** are **identical, the same, SYMMETRIC**.
3. So, within the **UNITY (#1, BEING ADDED UP)** of 3-dimensional **SPACE (1+2=3)**, we have **COUNTING (#2, MORE)** everywhere as the 4th dimension: **TIME (1, 2, 3)**

We can see how Einstein's equivalence principle of **UNITY(#1) = INFINITY(#2, More, Counting, Cycles)** results in **SPACE(#1) = TIME(#2)** or 4-dimensional

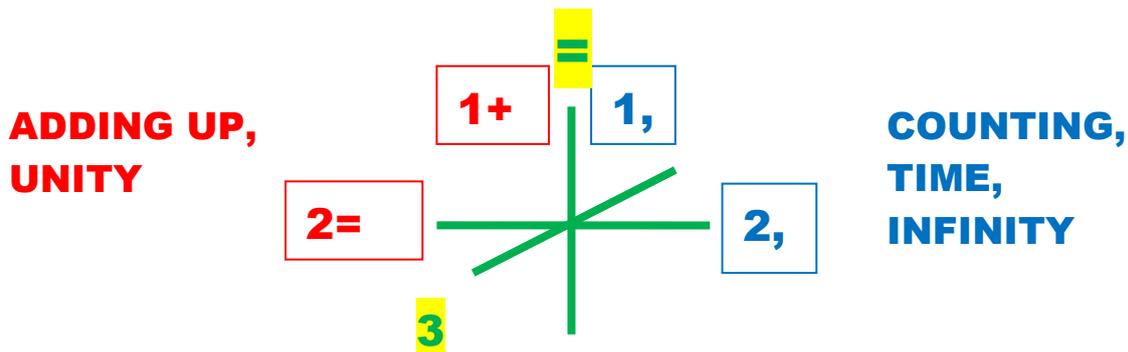
SPACE(#1)-TIME(#2)

For each of the **3 space dimensions (representing UNITY, #1)** to also be **MORE (#2; or as far apart from each other as possible while being one/identical/symmetric at the same time)**, they display right angles in their relationship: This gives us **ADDING UP (1+2=3)** and **COUNTING (1, 2, 3)** as the **SPACE-TIME CONTINUUM**, which is both a **UNIT** and **infinitely many event points (MORE, INFINITY)**.

Wherefore he resolved to have a **moving image of eternity**, and when he set in **order the heaven**, he made this **image eternal** but **moving according to number**, while **eternity itself rests in unity**; and this **image** we call **time**.

Plato

(Timaeus, translated by Benjamin Jowett, p.23, note: bold & colour mine;
<http://www2.hn.psu.edu/faculty/jmanis/plato/timaeus.pdf>)



SPACE(#1)-TIME(#2) is pure, elegant, simple, beautiful

MATHEMATICS.

It is a glorious feeling to perceive the unity of a complex of phenomena which appear as separate entities to direct sensory observation.

Albert Einstein

(Letter to Marcel Grossman, 14 April 1901, Collected Papers, vo.1, doc.100)

Einstein's great advance in 1905 was to put symmetry first, to regard the symmetry principle as the primary feature of nature that constrains the allowable dynamical laws (...) Ten years later this point of view scored a spectacular success with Einstein's construction of general relativity.

David Gross

(The role of symmetry in fundamental physics, PNAS, vol.93 no.25, 10.12.1996, p. 14256)

... Albert Einstein (...) brought a new style into thinking about Nature's fundamental principles. For Einstein beauty, in the specific form of symmetry, takes on a life of its own. Beauty becomes a creative principle.

Frank Wilczek

(A Beautiful Question, 2015, p.199)

I came to the conviction that only the discovery of a universal formal principle could lead us to assured results.

Albert Einstein

(Autobiographical Notes, p.49, 1996)

EINSTEIN'S EQUIVALENCE PRINCIPLE

AS THE

BEST, BIGGEST HABIT

Einstein's stunning Happiest Thought, his most elegant equivalence principle, being the simplest possible mathematical idea at the bottom of reality, tells us why it is the **BEST, BIGGEST HABIT** to have:

1. **UNITY(#1)** stands for **BEING HOLISTIC**, and **#2 (MORE)** represents **INFINITY**.
2. **INFINITY(#2)** embodies **THINKING & FEELING BIG**, with **UNITY (#1, ADDING UP)** making sure it stays united, i.e. positive or all-encompassing.
3. So **UNITY (#1, BEING ADDED UP) = INFINITY (#2, MORE)** ensures **THINKING & FEELING** in a uplifting fashion igniting learning, contemplating and UNDERSTANDING.

Psychologists have found out that the ways people tell their stories become so habitual that they finally become recipes for structuring experiences itself, for laying down routes into the memory, and finally, for guiding their lives.

Gail Sheely

(New Passages, 1995, p. 169)

His [the scientist's] religious feeling takes the form of rapturous amazement at the harmony of natural law, which reveals an intelligence of such superiority that, compared with it, all the systematic thinking and acting of human beings is an utterly insignificant reflection.

Albert Einstein

(Ideas and Opinions, 1982, p.40)

Everyone who is seriously involved in the pursuit of science becomes convinced that a spirit is manifest in the laws of the Universe—a spirit vastly superior to that of man ...

Albert Einstein

(Albert Einstein's Letter to Phyllis, 1936)

Creative thinking is simply finding new, improved ways to do anything.

David Schwartz

(The Magic of Thinking Big, 2016, p.114)

**UNITY(#1)=INFINITY(#2) is the BEST, BIGGEST HABIT, and it is pure,
elegant MATHEMATICS.**

...the truth always turns out to be simpler than you thought.
Richard Feynman
(The Character of Physical Law, 1992, p.171)

I have found that the simple things are usually the most profound.
Louise Hay
(The Power Is Within You, 1991, p. xiii)

... the power of grit (...) our passion and perseverance for long-term goals.
Angela Duckworth
(Grit, 2016, p. 269)

Nature is pleased with simplicity ...
Isaac Newton
(Principia Mathematica, book III, 1687)

*Philosophy is written in that great book which ever lies before our eyes—I mean the universe –
but we cannot understand it if we do not first learn the language and grasp the symbols, in
which it is written. This book is written in the mathematical language ...*
Galileo Galilei, 1623
(The Assayer, 1623, as translated by Thomas Salusbury in 1661, p. 178)

*Mathematics is a language plus reasoning; it is like a language plus logic. Mathematics is a
tool for reasoning (...) By mathematics it is possible to connect one statement to another (...)
mathematics is just organized reasoning.*
Richard Feynman
(The Character of Physical Law, 1992, pp.40-41)

*The theoretical scientist is compelled (...) to be guided by purely mathematical, formal
considerations (...), because the physical experience of the experimenter cannot lead him up
to the regions of highest abstraction.*
Albert Einstein
(Ideas and Opinions, a collection of writings by Albert Einstein, 1982, p.282)



EINSTEIN'S EQUIVALENCE PRINCIPLE

AS

COSMIC-MEDICINE

Einstein's stunning Happiest Thought, his most elegant equivalence principle, being the simplest possible mathematical idea at the bottom of reality tells us why it is the **COSMIC MEDICINE** for **WELL(#1)=BEING(#2)**:

1. **UNITY(#1)** stands for the IDEA of **WHOLENESS (WELL)**, and **#2 (MORE)** represents continuous **GROWTH or ENERGY**, since energy is defined as the **ability to do work, i.e. to do MORE (BEING)**.
2. **INFINITY(#2)** embodies 1, 2 aspects, since #2 can see itself as 1, 2 parts: **MIND (UNITY, #1) & BODY (MORE ADDED UP, #2)**, with **UNITY (#1, ADDING UP)** making sure the body stays united, i.e. **POSITIVE OR WHOLE**.
3. So **UNITY (#1, BEING ADDED UP) = INFINITY (#2, MORE)** ensures, in its **balanced state**, **THINKING & FEELING** in a uplifting fashion igniting learning, contemplating and UNDERSTANDING; in other words **BALANCE/SYMMETRY** of both the **SELF (UNITY, CONCENTRATION)** and the **ENVIRONMENT (INFINITY, OPENNESS)**.

We can say that:

1. **THE SPIRIT** is **SYMMETRY**, the eternal law of nature, its immaterial structure or premise. **THE SPIRIT IS UNITY**.
2. **THE BODY** is the **MORE-part** of **UNITY(#1)=INFINITY(#2)**, and as **MORE ADDS UP (UNITES)** due to **Unity=More**, the body appears as a UNIT containing MORE (different parts). This UNIT (the body) is, based on **UNITY=MORE**, connected with the entire universe (MORE).
3. **THE SOUL** is the **AWARNESS** that seeks **BALANCE/SYMMETRY** (UNDERSTANDING, comprehending ALL/MORE as ONE/UNITY).

**UNITY(#1)=INFINITY(#2) is the timeless COSMIC MEDICINE, and it is
pure, elegant MATHEMATICS.**

Scientific research is based on the idea that everything that takes place is determined by laws of nature, and therefore this holds for the actions of people.

Albert Einstein

(Albert Einstein's Letter to Phyllis, 1936)

Pure mathematics is, in its way, the poetry of logical ideas. One seeks the most general ideas of operation which will bring together in simple, logical and unified form the largest possible circle of formal relationships. In this effort toward logical beauty spiritual formulas are discovered necessary for the deeper penetration into the laws of nature.

Albert Einstein

(Letter to the Editors of the New York Times, "Professor Einstein Writes in Appreciation of a Fellow-Mathematician", Princeton University, May 1, 1935.)

Beauty of style and harmony and grace and good rhythm depend on simplicity.

Plato



... only the union of all branches of knowledge has meaning or value.

Erwin Schrödinger

(as quoted in: "From Galileo to Gell-Mann" by M. Bersanelli & M. Gargantini, 2009, p.235)

All religions, arts and sciences are branches of the same tree. All these aspirations are directed toward ennobling man's life, lifting it from the sphere of mere physical existence and leading the individual towards freedom.

Albert Einstein

(Out of My Later Years, a collection of essays by Albert Einstein, 1995, p.9)

I hold it true that pure thought can grasp reality, as the ancients dreamed.

Albert Einstein

(Ideas and Opinions, 1982, p. 274)

The object of all science, whether natural science or psychology, is to co-ordinate our experiences and to bring them into a logical system.

Albert Einstein

(The Meaning of Relativity, 1923, p.1)

