

-
- : (Jonathan Latham)
 - : [“The Meaning of Life \(Part I\)”](#) (2017.10.24)
 - :
 - :
 - : [“The Meaning of Life \(Part I\)”](#)
“Genetics Is Giving Way to a New
Science of Life”
-

(James Watson) (Francis Crick) DNA
1953 DNA . DNA 1953 30
DNA . DNA 1920
DNA
(1917)
(公憤)
. 1911 (Harry Pratt Judson)
. 1913
“ 가 ”
,
가 가
, 가 ‘ (psychobiology)
가 • •

1.

“ ”

1900

1929

(Max Mason)

가

“ ”

[]

가

(Lily Kay
Molecular Vision of Life, 1993)

(Lily Kay)

□The

(Edmund E. Day)

“

”

“

”

(Warren

Weaver)

“

”

“

”

“

”

가 가

“

” 1930

가

“

”

”

(Kay, 1993).

2.

‘ ’

—

—

•

•

가

가

(2)

1953

DNA

“ ”

가

3.

:

50

(

)

“

”

(Desmond, 1998).

가

가 가

가

—

—

가

가

(([]

(Darwin's

Bulldog)

.))

가

“

(salique law)—

”

가

가

가

가

가

가

가

가

가

.(Desmond, 1998).

가 ‘

’(protoplasm)

가

가

4.

)

(

1950

3 7

(Wallace, 2009).

([Gundle et al., 2010](#)).

가

()

([Vrecko, 2008](#)).

1920

1930

(Adolf Hitler)

'(genome sequencing)

가 DNA가

가

1 '(presumptive primary cause)

DNA

“

”

(Mullis, 1997).

5.

1865

“ [] ”

가

가

(Herbert Spencer) (E. O. Wilson),
(Richard Dawkins), (Steven Pinker), DNA
(含意) ㅍ
: ㅍ(Sociobiology: The new synthesis, 1975) ㅍ
ㅍ(The Selfish Gene, 1976) ㅍ ㅍ(The Extended
Phenotype, 1982)

. DNA
가 , , ,
(가 [Kales et al., 1980](#)).
가

6. ‘ , ’
2016 (Gary Greenberg,)
「 [\(棺\) 가?](#) 」 .(([] ‘ , ’ 가 .)) ‘ , ’ “
(反) ” (Richard Lerner)([Lerner, 2007](#))
“ ” (Douglas Wahlsten)([2012](#))

가 ()
가
가
가 MIT < 2013 > (([]

] 「 (Eric Lander) .) 」 ‘ (phantom) 4가

([Zuk et al., 2013](#)). 180

가 ([Ioannidis, 2007](#)) 가 ([Manolio et al., 2009](#); [Dermitzakis and Clark, 2009](#))

([Ioannidis and Panagiotou, 2011](#)) 가 ([Buchanan et al. 2006](#); [Wallace, 2006](#); [Charney and English, 2012](#)).

()

가 .

UC

C. (Richard C Strohman) 1997

」 ([“The coming Kuhnian revolution in biology”](#))

“ []

” , “

”

가 1993

“

”

「 _____

_____」

,([] to alternative paradigms of life)

(A short guide

.)

가 “ ” — • • • • •

—

가

DNA

가

가

가

DNA

가가

DNA

—RNA

—

가

가

GMO

(

)

DNA가

DNA

(prescientific vitalism)

DNA가

7.

1860

(Ernst Haeckel)

(

)

“

”

(1882)

(

가

)

“

”

“

가

”

(John Morley, 1882, Desmond 1998

)

가

. DNA

가 DNA

가

가

1975

, E.O.

『

<

>(NY Review of Books)

:

『(Sociobiology: a New Synthesis)

(([

] C.H. Waddington

1975 8 7

Mindless Societies

.)

.([]

.)

가

가

가

가

가

『

』

가

[and Joseph, 2013](#))

([Chaufan](#)

(素因)

(場)

>

—

,

<

—

(Dorothy Nelkin)

(Susan Lindee)

(Preface to the second edition, *The DNA Mystique: The gene as a cultural icon*, 2004).

(가)

가

가

가

가

, 20

가

가

2

가

(Adolf Eichmann)

(Hannah

Arendt)

가

“

”(banality of evil)

가

(『 : 1933-1945』) .

(『 II』)

가,

가가

가

(『 II』)

가

. DNA가

가

DNA

. DNA

DNA가

—

DNA

가

—

가

가



References

Abraham, TH (2004) [Nicolas Rashevsky's Mathematical Biophysics](#). Journal of the History of Biology 37: 333-385.

Buchanan, AV, KM Weiss, and SM Fullerton. [Dissecting Complex Disease: The Quest For the Philosopher's Stone?](#) International Journal of Epidemiology 35.3 (2006): 562-571.

Charney E, and English W (2012) [Candidate Genes and Political Behavior](#). American Political Science Review 106: 1-34.

Chaufan C, and Joseph J (2013) [The 'Missing Heritability' of Common Disorders: Should Health Researchers Care?](#) International Journal of Health Services 43: 281-303. Lucy S. Dawidowicz (1975) The War Against the Jews: 1933-194 New York: Holt, Rinehart and Winston

Dawkins R (1982) The Extended Phenotype. Oxford University Press.

Dermitzakis E.T. and Clark A.G. (2009) [Life after GWA studies](#). Science 326: 239-240.

Desmond A (1998) Huxley. Penguin books.

Greenberg, G (2016) [How many nails does it take to seal the](#)

[coffin?](#) Developmental Psychobiology 9999: 1-2.

Gundle KR, Dingel, M and Barbara A. Koenig (2010) "[To Prove This is the Industry's Best Hope](#)": Big Tobacco's Support of Research on the Genetics of Nicotine. Addiction. 105: 974-983. doi: 10.1111/j.1360-0443.2010.02940.x

Ioannidis, J.P., (2007) [Non-replication and inconsistency in the genome-wide association setting](#). Hum Hered. 64: 203-13.

Ioannidis JP and Panagiotou O (2011) [Comparison of Effect Sizes Associated With Biomarkers Reported in Highly Cited Individual Articles and in Subsequent Meta-analyses](#). J. Am. Med. Assoc. 305: 2200-2210.

Kales, A, CR Soldatos, EO Bixler, RL Ladda, DS Charney, G Weber and PK Schweitzer (1980) [Hereditary factors in sleepwalking and night terrors](#). The British Journal of Psychiatry 137: 111-118. 10.1192/bjp.137.2.111

Kay, Lily E. (1993) The Molecular Vision of Life. Oxford University Press.

Latham, J (2017). [Genetics Is Giving Way to a New Science of Life](#). Independent Science News Feb 2017.

Lerner RM (2007) [Another nine-inch nail for behavioral genetics!](#) Human Development 49 1-7

Lewontin R, Rose S, Kamin, L (1984) Not in Our Genes. Pantheon Books.

Manolio T. et al. (2009) [Finding the missing heritability of complex diseases](#). Nature 461: 747-753.

Mullis, K Dancing Naked in the Mind Field. 1998, Vintage Books.

Nelkin D and Lindee MS (2004) The DNA Mystique: The gene as a cultural Icon. University of Michigan Press

Vrecko S (2008) [Capital ventures into biology: biosocial dynamics in the industry and science of gambling](#). Economy and Society 37: 50-67.

Wahlsten D (2012) [The Hunt for Gene Effects Pertinent to Behavioral Traits and Psychiatric Disorders: From Mouse to Human](#). Dev. Psychobiology 54: 475-492.

Wallace HM (2006) [A model of gene-gene and gene-environment interactions and its implications for targeting environmental interventions by genotype.](#) Theoretical Biology and Medical Modelling 2006, 3:35. .

Wallace H (2009) Big tobacco and the human genome: Driving the scientific bandwagon? Genomics, Society and Policy 5: 1-54.

Wilson EO (2000) Sociobiology: The New Synthesis. Belknap Press.

Zuk O, E Hechter, SR Sunyaev, and ES Lander (2013) [The mystery of missing heritability: Genetic interactions create phantom heritability.](#) 109: 1193-1198. doi: 10.1073/pnas.1119675109