Chance Or Planning Essay, Research Paper

Chance or Planning

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Intelligence and planning are necessary factors in scientific research, however

chance and luck are also important and somewhat necessary factors. The

Autobiography of Charles Darwin and the memoir, The Double Helix, written by

James Watson, prove this assertion. Charles Darwin, James Watson and Francis

Crick were all intelligent men that planned their experiments, however without

chance and luck their success and scientific achievement would not be as great.

Intelligence and planning are important in scientific discovery, but are not

always the dominating forces that drive scientific research. Such is the case

with Charles Darwin, James Watson and Francis Crick. All three of these men

were extremely intellectual, but their intellect only contributed partially to

their success. Intellect and planning, combined with chance and luck

contributed to their overall success.

People take chances on a daily basis. If you actually stop and think about it,

life is one big game of chance. It is by chance that we are born, that we

continue to survive, and that we will eventually die. Some people feel that

this cycle occurs do to the will of God, others, like Charles Darwin believe

that it happens based on chance or natural selection. Whatever you believe or

disbelieve, life cannot be planned. No matter how hard a person attempts to

“plan” their path in life, it is by chance and luck where that path takes us.

Darwin’s career was also based on chance, not planning. Darwin never planned to

become a scientist or the father of natural selection. It was by pure chance

that he obtained the job on the voyage of the Beagle, which started his career.

Darwin stated about this voyage that, “The voyage of the Beagle has been the by

far the most important event in my life and has determined my whole career. . .”

(Darwin, p.76) Darwin had not planned to take the trip on the Beagle, he

obtained the opportunity by mere chance. One can attempt to “plan” for a job or

career, but chance and luck are the major factors which allow for success.

Although Darwin’s intellect played a role in obtaining the position, chance and

luck were the major factors.

Many scientists suffer great strokes of luck. Two other scientists that did

not “plan” their success were James Watson and Francis Crick. These two men

were not great planners of scientific research, but through chance and luck they

obtained their scientific goal. Watson and Crick discovered the structure of

DNA and its double helix. Rosalind Franklin, Maurice Wilkins, and Linus Pauling

were other scientists that were extremely close to discovering the structure of

DNA at the same time as Watson and Crick. They all had basically the same

information, however Watson and Crick, due to chance and luck finished the race

first, but not very far ahead of their competitors. Watson and Crick admit that

the race to find the structure of DNA was close, however their luck or chance

contributed tremendously to their achievement. Watson and Crick, much like

Darwin achieved their “greatness” due to mere chance, not planning.

Watson and Crick were very fortunate that their chance or good stroke of luck

did not run out. They were lucky that they conceived the notion to make a three

dimensional model of the helix. They were also lucky that death did not strike

either of them. Crick states, in the book The Double Helix, that, “If Watson

had been killed by a tennis ball I am reasonably sure that I would not have

solved the structure alone. . .” (Watson, p. 143) Fortunately Watson was not

killed by a tennis ball and Crick did not have to ponder the problem of DNA

alone. Both men were extremely fortunate to have each other. Again luck and

chance were important factors in their discovery, not planning.

Charles Darwin was also lucky that death did not strike him. Disease is

extremely common when traveling by ship, and by mere chance Darwin was not

struck with any life threatening illness. Darwin, while traveling on the Beagle,

could have contracted any type of disease. Medications for illnesses were not

easily available for consumption, and often the infected patients died. By

chance Darwin did not become ill, if he had perhaps the world would not know

about evolution or natural selection.

Darwin could not “plan” for the success of his book Origin of the Species. It

was by chance that some people agreed with his theory of natural selection.

Darwin stated about his religious belief that, “. . . I gradually came to

disbelieve in Christianity as a divine revelation.” (Darwin, p. 86) Darwin

became disillusioned in Christianity due to the fact that several of his closest

friends did not believe in God. Darwin stated about this that, “I can indeed

hardly see how anyone ought to wish Christianity to be true. . . the text seems

to show that the men who do not believe, and this is my father, brother, and

almost all of my best friends, will be everlastingly punished. And this is a

damnable doctrine.” (Darwin, p. 87)

Darwin went out on a limb when he expressed his disbelief in God and the Bible.

He could not plan for the general public to agree with his radical idea. It was

by chance that his book became such a success. Both believers and non-believers

purchased his book. Also, by chance he converted many non-believers into

believing his radical form of thought.

A Cambridge painter once stated that, “. . . the important thing is to be there

when the picture is painted. And this it seems to me, is partly a matter of

luck, partly good judgement, inspiration, and persistent application.” (Watson,

p. 145) This statement holds extremely true to Watson and Cricks discovery of

DNA. Intellect, persistence, and good judgement contributed to their success.

However, luck and chance were the major contributing factors.

Charles Darwin said that his, “. . . success as a man of science, whatever this

may have amounted to, has been determined, as far as I can judge, by complex and

diversified mental qualities and conditions. Of these the most important have

been – the love of science – unbounded patience in long reflecting over any

subject – industry in observing and collecting facts – and a fair share of

invention as well as common sense. With such moderate abilities as I possess,

it is truly surprising that thus I should have influenced to a considerable

extent the beliefs of scientific men on some important points.” (Darwin, p. 145)

Although Darwin stated his theory with clear and concise arguments, it was by

chance that people believed him, considering he could not plan for his future

success.

Although planning is somewhat important in scientific research and discovery,

chance plays a much more important role. Without chance most scientific

discoveries would not have happened. John Lennon was quoted as stating, “Life

is what happens as we make other plans.” Science is much like life. One can

not plan for it, it just takes place.