# The weasel returns: Truman replies to Curtis

### by *Royal Truman*

Professor Dawkins describes his computer programs, written in Basic and later in Pascal, using words such as 'mutation', 'generation', 'selection', and so on. But he does not inform us just what the sentences actually represent. They might represent genes, proteins, operons or genomes, although **from the context and from other publications** an expressed gene is most likely.

The parameters and programming details are <u>not</u> based in the remotest on any biological data, or on considerations such as base-pair mutational probability, codon redundancy, population genetics, effect of neutral and destructive mutations, reproductive selectivity coefficients, etc.

A simpler algorithm, which reproduces the guaranteed convergence behaviour, clarifies what Dawkins' algorithm actually shows: that **change is only possible towards a pre-selected goal.** Once a letter falls into place, Dawkin's program ensures it won't mutate away. This is shown in the two following examples:

**Example 1.** Provided in: Dawkins, R., *The Blind Watchmaker*, Penguin Books, London, 1986; p. 48.

| | M | E | T | H | I | N | K | S | | I | T | | I | S | | L | I | K | E | | A | | W | E | A | S | E | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Y | | Y | V | M | Q | **K** | **S** | P | F | **T** | X | W | **S** | H | **L** | **I** | **K** | **E** | F | V | | H | Q | Y | **S** | P | Y |
| 20 | Y | **E** | **T** | **H** | **I** | **N** | **K** | **S** | P | I | T | X | I | **S** | H | **L** | **I** | **K** | **E** | F | **A** | | **W** | Q | Y | **S** | **E** | Y |
| 30 | **M** | **E** | **T** | **H** | **I** | **N** | **K** | **S** | | I | T | | I | **S** | S | **L** | **I** | **K** | **E** | | **A** | | **W** | **E** | F | **S** | **E** | Y |
| 40 | **M** | **E** | **T** | **H** | **I** | **N** | **K** | **S** | | I | T | | I | **S** | B | **L** | **I** | **K** | **E** | | **A** | | **W** | **E** | **A** | **S** | **E** | S |
| 50 | **M** | **E** | **T** | **H** | **I** | **N** | **K** | **S** | | I | T | | I | **S** | J | **L** | **I** | **K** | **E** | | **A** | | **W** | **E** | **A** | **S** | **E** | O |
| 60 | **M** | **E** | **T** | **H** | **I** | **N** | **K** | **S** | | I | T | | I | **S** | | **L** | **I** | **K** | **E** | | **A** | | **W** | **E** | **A** | **S** | **E** | P |
| 64 | **M** | **E** | **T** | **H** | **I** | **N** | **K** | **S** | | I | T | | I | **S** | | **L** | **I** | **K** | **E** | | **A** | | **W** | **E** | **A** | **S** | **E** | **L** |

**Example 2.** Provided in: Dawkins, R., *New Scientist*, **34**, Sept. 25, 1986; p. 34.

|     | M | E | T | H | I | N | K | S | I | T | I | S | L | I | K | E | A | W | E | A | S | E | L |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| #1  | W | D | L | T | M | **N** | L | T | D | **T** | J | B | **S** | W | I | R | Z | R | E | Z | L | M | Q | C | O | P |
| 10  | **M** | D | L | D | M | **N** | L | **S** | **I** | **T** | J | **I** | **S** | W | H | R | Z | R | E | Z | M | E | C | **S** | P |
| 20  | **M** | **E** | L | D | **I** | **N** | L | **S** | **I** | **T** | **I** | **S** | W | P | R | **K** | **E** | Z | **W** | **E** | C | **S** | **E** | **L** |
| 30  | **M** | **E** | **T** | **H** | **I** | N | G | **S** | **I** | **T** | **I** | **S** | W | **L** | **I** | **K** | **E** | B | **W** | **E** | C | **S** | **E** | **L** |
| 40  | **M** | **E** | **T** | **H** | **I** | **N** | **K** | **S** | **I** | **T** | **I** | **S** | **L** | **I** | **K** | **E** | I | **W** | **E** | A | **S** | **E** | **L** |
| 43  | **M** | **E** | **T** | **H** | **I** | **N** | **K** | S | **I** | **T** | **I** | **S** | **L** | **I** | **K** | **E** | **A** | **W** | **E** | A | **S** | **E** | **L** |

**Truman's data for Dawkins' weasel**
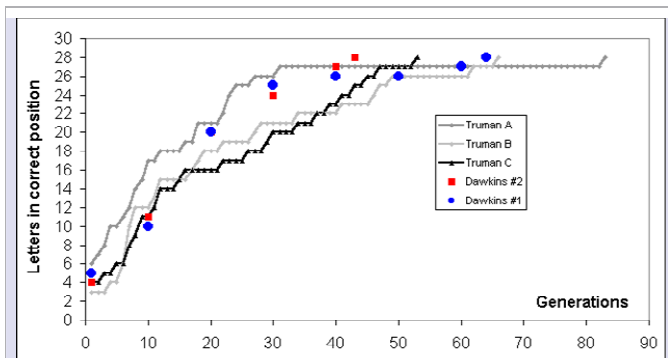


Figure 1. (Click figure to enlarge) Convergence behaviour from Truman's program straddles that reported by Dawkins (some runs were selected out of 40 generated from Truman's program).

The data for the three curves in Figure 1 labelled 'Truman A', 'B', and 'C' is in the spreadsheet '**ImprovementRate**'.
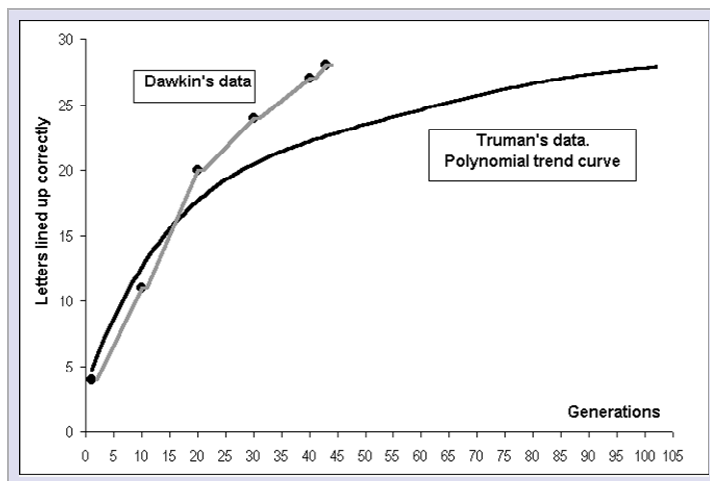
Figure 2. (Click figure to enlarge)
Data generated by Dawkins' program and approximate average of 10,000 runs from Truman's. On average Truman's curves lie further to the right (they converge a little more slowly).

The data for Figure 2 has not been supplied as a table. This data is complex and rather long. The raw basis is found in the spreadsheet '**Original summary 10,000 sorted**' (0.5 MB file). At the bottom of the second column an 'Average=' function has been added. Notice that the grand average for 10,000 runs is 102 generations for convergence to the target sentence.

The data plotted in Figure 2 (i.e. average number of letters lined up after each generation) is found in the spreadsheet '**Dawkins vs Truman**'. Approximate weighted number of successful letters [as mentioned, using the raw data in the last sheet (**Original summary 10,000 sorted**)] per generation was used. Notice from the first column that indeed the average number of generations needed for all 28 letters to be lined up is 102.

**Weasel words**

**Refuting a common ploy to persuade people that evolution has been 'proven by computer'**

*by Werner Gitt with Carl Wieland*

Oxford professor Richard Dawkins is perhaps evolution's chief apostle—certainly one of the most vocal and influential neo-Darwinists in the world. He also aggressively and unashamedly promotes atheism as a logical consequence of evolution. His book *The Blind Watchmaker* has probably resulted in many thousands rejecting a former profession of Christian faith. It purports to show that all of the apparent design in the natural world is a consequence of unplanned accumulation, by selection, of lucky genetic mistakes.[1]
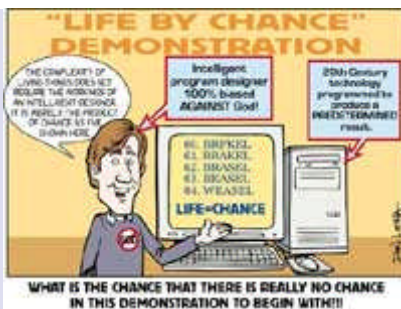


Click **here** for larger view.

represented by an unimaginably vast amount of information, stored and transmitted in coded form. Dawkins realises that the basic challenge for anyone wanting to be (in his words) an 'intellectually fulfilled atheist' is to explain how all this information arose by natural processes, that is, without a guiding intelligence. However, information science, the specialty field of one of us (Dr Gitt), makes it perfectly clear that it is impossible for random processes to generate true information. So how does Dawkins purport to show otherwise?

One of the most effective of the devices in his book, a demonstration he has repeated for television audiences, is his alleged computer simulation of evolution by using the English sentence (from Shakespeare's *Hamlet*), 'Methinks it is like a weasel'.[2]

His computer program starts with a random sequence of 28 letters or spaces. It is then copied repeatedly, representing reproduction. Random copying errors are allowed, representing mutations. The computer program checks all the 'daughter' sentences, and selects that one which most resembles the target sequence, 'Methinks it is like a weasel'. This is said to represent natural selection.

Not surprisingly, within a few generations (43 and 64 in the examples shown below), the target sentence is reached. This is purported to show that real information can arise by the natural processes of mutation and selection, unaided by intelligence.

There is currently a spate of new books about the Lord Jesus Christ which constantly present one or the other new, weird and false idea, contrary to the New Testament—for example, that Jesus was a wicked priest. A Professor at the Heidelberg School of Theology, Klaus Berger, once remarked, 'Please buy and read such a book, then you will realise what degree of gullibility is ascribed to you.' Similarly, Dawkins' 'weasel' example makes it clear how much feeble-mindedness he assumes in his readership.

This sort of computer game can be played by anyone, and will *always* reach its goal. Why? Because the whole design involves selecting a target in advance! The program is fixed, the target is specified—even the number of letters is given in advance.

It is therefore obvious that no information is generated in Dawkins' example—on the contrary, the information (the sentence 'Methinks it is like a weasel') has been predetermined![3]

**Computers and predetermined results**

'Not surprisingly, within a few

## Dawkins' example

Predetermined target sentence:
METHINKS IT IS LIKE A WEASEL

**First test:**

Gen. 01 WDLTMNLT DTJBKWIRZREZLMQCO P

Gen. 02 WDLTMNLT DTJBSWIRZREZIMQLO P

Gen. 10 MDLDMNLS ITJISWHRZREZ MECS P

Gen. 20 MELDINLS IT ISWPRKE Z WECSEL

Gen. 30 METHINGS IT ISWLIKE B WECSEL

Gen. 40 METHINKS IT IS LIKE I WEASEL

Gen. 43 METHINKS IT IS LIKE A WEASEL

**Second test:**

Gen. 01 Y YVMQKZPFJXWVHGLAWFVCHQYOPY

Gen. 10 Y YVMQKSPFTXWSHLIKEFV HQYSPY

Gen. 20 YETHINKSPITXISHLIKEFA WOYSEY

Gen. 30 METHINKS IT ISSLIKE A WEFSEY

Gen. 40 METHINKS IT ISBLIKE A WEASES

Gen. 50 METHINKS IT ISJLIKE A WEASEO

Gen. 60 METHINKS IT IS LIKE A WEASEP

Gen. 64 METHINKS IT IS LIKE A WEASEL

## References and notes

1. His later books *River out of Eden* and *Climbing Mount Improbable* continue his atheistic evangelising. See **online refutations** of *River out of Eden* and *Climbing Mount Improbable*. **Return to text**
2. For technical details on the reasons why random processes cannot give rise to information, see **Werner Gitt**, *In the Beginning was Information* . **Return to text.**
3. There are many other serious problems with Dawkins' 'demonstration'. See Walter ReMine, *The Biotic Message*, St Paul Science, St Paul,

USA for a detailed treatment. See **online review** of this book. **Return to text.**

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