



"The Gold Bug Variations"
a novel by Richard Powers
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From a quick synopsis, Richard Powers' novel *The Gold Bug Variations* would appear relatively simple. Nominally there are three main themes: deciphering the genetic code, as told in the story of Stuart Ressler, a young researcher beginning his career at the University of Illinois in 1957; Bach's *Goldberg Variations*, which become Ressler's parallel obsession; and a pair of more-or-less conventional love stories. But just as Nature has arranged that all biological function arises from the permutations of only four bases in DNA, Powers manages to develop and combine his themes to produce incredible richness: a hymn to the endlessly evolving, infinitely variable, living universe.

The theme of the infinite is sounded continually and in many guises, most notably in the challenge: how should we live our necessarily finite lives in a world of infinite possibility? Ressler gives up his research career, on the very brink of probable success, in the face of the realization that the code problem, as important and challenging as it is, is trivial compared to the complexity and variety of life — even though the latter is contained in the former. In fact, virtually the entire research team (suggestively titled "Cyfer") drops out: one kills himself (taking all the laboratory rats with him); one abandons his wife and daughter based on nothing more than a low genetic probability that the child is his; one undergoes what can only be described as a religious conversion, stuck overnight in the library during a storm. Where else should a religious experience take place, in this Age of Information?

The general concept of code is a major focal point of the work — not only in the obvious manifestations of the genetic code and of computer programming (after abandoning his research career, Ressler reappears years later in a data processing shop), but also concerning language as code. The novel is full of allusions, metaphors, puns, that need to be translated before the underlying message can be fully read. One need read no further than the title — punning on the Bach work as well as the Poe story, where decoding a secret message leads to discovery of a great treasure — to appreciate that the book is in this sense its own subject.

Furthermore, the structure of the work is closely tied to the subject material, both overtly and subtly. The *Goldberg Variations* consist of thirty-two sections: an aria, thirty variations, and the aria repeated. The book is arranged in an introductory "aria," a poem that has the same number of lines as Bach's aria has measures, followed by thirty chapters, and a closing "recapitulation" (more on this later). Every third variation in Bach's work is a canon, where a theme begins in one voice, continues while the theme re-enters as a second voice after some time delay, and a third voice in the bass ties them together. Powers' two love stories — one between Ressler and a married woman on his research team; the other between Franklin Todd, a coworker in the data processing facility, and Jan O'Deigh, a librarian whom Todd recruits to help him find out about Ressler's past — are highly imitative and told simultaneously (or as close to it as the medium allows), but with one displaced in time relative to the other — in this case, by 25 years. O'Deigh also functions as the third voice in this canon, looking back at both Ressler's scientific work and her own part in the story from a couple of years further on.

Powers' intricate interweaving of materials is continually original and striking. One example begins with the recurring metaphor of the Perpetual Calendar: simple rules allow us to determine in which future year the calendar will look the same as this year; but what happens in that year is eternally different; life is far too complex and varied to repeat itself. The end of the *Goldberg Variations* is marked "Aria da Capo e Fine;" Powers ends his book with that heading followed by: "What could be simpler? In rough translation: Once more with feeling." But it doesn't mean that, rather "Play the aria again from the beginning, and end." Going back and repeating equals termination. Ressler tells O'Deigh he is returning to Illinois to participate in a research project; for a moment she is excited to think he is resuming his scientific career, then understands: it is a cancer study, and he is going not as scientist but as subject. Ressler hears the *Goldberg Variations* on the radio and first thinks it is the same recording he has been listening to for years, but then realizes it is a new version by the same performer. What great luck, after all these years, to be able to hear a new conception of the piece — but at its end, Ressler learns that the recording is being played in tribute to the artist, who has just suffered a fatal stroke.

The artist in question is, of course, Glenn Gould, who constitutes an important figure in the book even though he is never named. Reminiscent of the phrase beloved by patent attorneys: "The entire content of [an earlier patent] is incorporated herein by reference," here we have an entire character, whose story

is in many ways parallel to Ressler's, built into the story simply by allusion. An efficient and essential device, if a book dealing with the infinite is to be kept short of infinite length.

Clearly this book will reward most those readers willing to devote the effort needed to extract its richness from these complexities; but untangling the structural network and deciphering the code are by no means its main points. *The Gold Bug Variations* has an important message for everyone — a remarkable achievement.