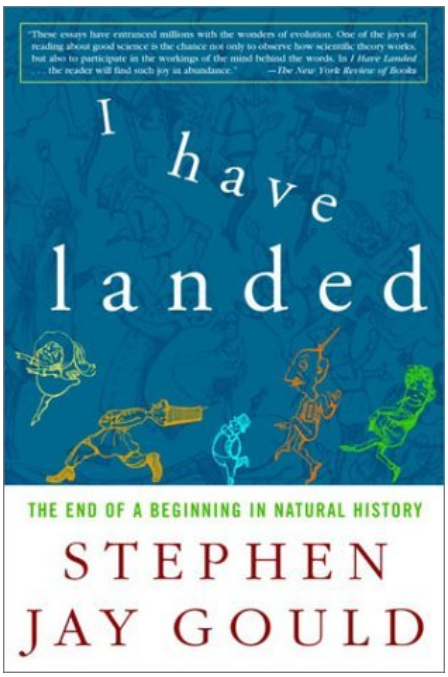

I Have Landed: The End of a Beginning in Natural History

Stephen Jay Gould

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Here is bestselling scientist Stephen Jay Gould's tenth and final collection based on his remarkable series for Natural History magazine--exactly 300 consecutive essays, with never a month missed, published from 1974 to 2001. Both an intellectually thrilling journey into the nature of scientific discovery and the most personal book he has ever published, I Have Landed marks the end of a significant chapter in the career of one of the most acclaimed and widely read scientists of our time.
Gould writes about the themes that have defined his career, which his readers have come to expect and celebrate, casting new light upon them and conveying the ideas that science professionals exchange among themselves (minus the technical jargon). Here, of course, is Charles Darwin, from his centrality to any sound scientific education to little-known facts about his life. Gould touches on subjects as far-reaching and disparate as feathered dinosaurs, the scourge of syphilis and the frustration of the man who identified it, and Freud's "evolutionary fantasy." He writes brilliantly of Nabokov's delicately crafted drawings of butterflies and the true meaning of biological diversity. And in the poignant title essay, he details his grandfather's journey from Hungary to America, where he arrived on September 11, 1901. It is from his grandfather's journal entry of that day, stating simply "I have landed," that the book's title was drawn. This landing occurred 100 years to the day before our greatest recent tragedy, also explored, but with optimism, in the concluding section of the book.
Presented in eight parts, I Have Landed begins with a remembrance of a moment of wonder from childhood. In Part II, Gould explains that humanistic disciplines are not antithetical to theoretical or applied sciences. Rather, they often share a commonality of method and motivation, with great potential to enhance the achievements of each other, an assertion perfectly supported by essays on such notables as Nabokov and Frederic Church.
Part III contains what no Gould collection would be complete without: his always compelling "mini intellectual biographies," which render each subject and his work deserving of reevaluation and renewed significance. In this collection of figures compelling and strange, Gould exercises one of his greatest strengths, the ability to reveal a significant scientific concept through a finely crafted and sympathetic portrait of the person behind the science. Turning his pen to three key figures--Sigmund Freud, Isabelle Duncan, and E. Ray Lankester, the latter an unlikely attendee of the funeral of Karl Marx--he highlights the effect of the Darwinian revolution and its resonance on their lives and work.
Part IV encourages the reader--through what Gould calls "intellectual paleontology"--to consider scientific theories of the sixteenth and seventeenth centuries in a new light and to recognize the limitations our own place in history may impose on our understanding of those ideas. Part V explores the op-ed genre and includes two essays with differing linguistic formats, which address the continual tug-of-war between the study of evolution and creationism.
In subsequent essays, in true Gould fashion, we are treated to moments of good humor, especially when he leads us to topics that bring him obvious delight, such as Dorothy Sayers novels and his enduring love of baseball and all its dramas. There is an ardent admiration of the topsy-turvy world of Gilbert and Sullivan (wonderfully demonstrated in the jacket illustration), who are not above inclusion in all things evolutionary.
This is truly Gould's most personal work to date. How fitting that this final collection should be his most revealing and, in content, the one that reflects most clearly the complexity, breadth of knowledge, and optimism that characterize Gould himself. I Have Landed succeeds in reinforcing Gould's underlying and constant theme from the series' commencement thirty years ago--the study of our own scientific, intellectual, and emotional evolution--bringing reader and author alike to what can only be described as a brilliantly written and very natural conclusion. "From the Hardcover edition."

I Have Landed: The End of a Beginning in Natural History Details

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From Reader Review I Have Landed: The End of a Beginning in Natural History for online ebook

Makomai says

S.J. Gould e` come sempre pomposo, ma questa volta meno interessante del solito. Preferisco le altre raccolte dei suoi saggi. Adoro le microstorie, ma qui sono farcite di correlazioni non sempre rilevanti: si ha l'impressione (piu' che in altri suoi saggi) di un gratuito sfoggio di compiaciuta erudizione. Interessante la nozione che Freud avrebbe basato parte delle sue teorie sull'assunto, allora in voga (e poi rivelatosi infondato e assolutamente erroneo) che l'ontogenesi ricapitoli la filogenesi.

Liedzeit says

The usual mixture of essays. Most of them connected in one way or another to Darwin. He mentions that Origin was published in 1859 probably around 50 times. Some personal stuff, like the title about his grandfather arriving in America on 9/11 in 1901. And about the other event 100 years later.
One about Nabokov, arguing that he would have been or was a scientist that surpasses his fame as a novelist. I liked the essay about the only guy present at Marx' funeral who was not a socialist but a firm conservative, E. Ray Lancaster. Science painters, Frederic Church and Isabelle Duncan. One piece on Gilbert & Sullivan. He talks about the curious tale of the creation of earth by God, why he always found the creation of the firmament, second day, negligible but changed his mind when he considered the context of the times. „ I failed to appreciate the controlling theme of the whole story!“ That is that the creation is not so much creatio as unfolding. Narthex of Saint Marco.
The term evolution in its original meaning is the coming of something inherently existing. As such it is still used in Astronomy. The sun evolves to a white dwarfs. Change of meaning.
The wonderful tale of Haeckel with his phylogeny follows ontogeny. Known to contemporaries as faked- but still in the textbooks a hundred years later. Nice denouncing by Aggasiz. „Abscheulich“ as comment in his personal copy of the book.
A guy, Sir Thomas Browne in 18th century who proves that the common view that jews stink is false.
Tiedeman who proves that negroes are not inferior - and suppressing the data he found that their brain is smaller on average.
Blumenbach, credited, or discredited with the foundation of racism by dividing mankind in 4 later 5 races was himself also of the opinion that there are differences. Except that he thought that Caucasians are more beautiful. Literally the people of the Caucasus.

Bea says

I enjoy reading Gould, and respect his efforts to avoid "dumbing down" and oversimplifying discussions in his essays ... but I do believe his description of himself as a "street kid" is fairly silly, and he does insist on it so in this collection. This was one of those books which I could not resist arguing with the author in pencil in the margins.

Apio says

Why Not in Wonderland?

Once again, I have taken up a book of Stephen Jay Gould's essays. There is no doubt that he was one of the best essayists of our times, writing with humor, intelligence and feeling, But there is one theme that comes up far too often in his later essays to be ignored. This theme is best summarized in his own words: "these two great tools of human understanding [science and religion] operate in a complementary (not contrary) fashion in their totally separate realms: science as an inquiry about the factual state of the natural world, religion as a search for spiritual meaning and ethical values." (p. 214)

I am not interested in going to my critique of science just yet, but I do want to mention one of its central themes, since it has some relevance to my present argument. The early developers of modern science in the West (Copernicus, Bacon, Galileo, Newton, ...) were all christians. They founded their scientific endeavor on a religious basis: the idea that, since the universe was created by god, it must operate on universal natural laws. It would require another long essay to even began to examine all the implications of this assumption that underlies modern science.

What I want to examine right now are the false premises by which Gould's liberal tolerance led him to uphold an institution that has long since proved itself to be a tool ofdomination, oppression and forced ignorance as a source of spiritual and ethical guidance.

First of all, Gould simply accepts compartmentalization, specialization and the division of social life and knowledge into separate spheres as a given. He doesn't show any sign of recognizing the historical nature of this division. If certain social divisions can be traced back to the origins of civilizations, the compartmentalization of knowledge is a modern phenomenon--as mentioned above, at the time modern science arose, religious concepts were integral to its birth. Though Gould doesn't recognize the religious nature of the concept of universal natural laws, he does recognize this concept as the assumed foundation upon which modern science operates. Even starting from this foundation, modern science has undermined the necessity for god. But once god is gone, there is no more basis for assuming that there are universal natural laws. Thus, modern science, by undermining the foundations of religion, has brought its own foundations into question.

From its origins until the beginning of the modern era, religion has not been a separate sphere within social life, but rather the system of beliefs essential for upholding a society and its institutions in the minds of those who make up that society. As such, it has never been a search for spiritual meaning and ethical values, but rather the imposition of a spiritual and moral conception of the world that upholds the values of the rulers of a society. Etymologically, religion refers to a joining back together of things that have been separated. A lot of silly things have been said about this, but I think that it is best understood if we look at the social divisions that occurred at about the time religion arose. This was when society divided into classes, wealth and power getting concentrated into the hands of a few who lorded it over the rest. In such a situation, conflict was inevitable. The task of religion was to create social unity through the imposition of a concept of life that justified existing social relationships and a morality that supported submission to one's social superiors. It reunited society precisely by naturalizing its divisions. Thus, it originated as a tool for justifying domination, exploitation and oppression, and for keeping the exploited classes in ignorance. As an imposed answer, it left no place for searching.

In fact, the association of religion with a search for spiritual meaning is a phenomenon of the modern era. In

earlier times, where such a search has arisen, it has been a questioning of or a rebellion against religion--in the form of heresy, philosophy, sorcery, alchemy, poetry... As such, the search was an ongoing process that was able to free ethics from the set rules of morality. But the linking of the search for spiritual meaning to religion that began with the protestant Reformation was not an equation of the two. Rather, protestantism individualized religious conversion, making it a personal, voluntary decision. Thus, religion was not itself a spiritual search, but was rather the answer to be found at the end of one's spiritual search. It brought the search to an end. John Bunyan's Pilgrim's Progress is a literary description of this process.

Religion was never intended to be a "separate realm" among specializations. It was meant to be a total worldview, encompassing all knowledge. We know that it has failed completely in providing an understanding of "the factual state of the natural world". This is because it is by its nature a closed system of understanding, a final answer. How can we think that it would do any better as a guide in the "search for spiritual meaning and ethical values". Gould should have been able to see that in places where religious thought continues to be strong, a nuanced approach to meaning and an open exploration of ethical questions get suppressed along with the free exploration of the natural world. The acceptance of evolution in Europe has gone hand-in-hand with a decline in religiosity and with an exploration of other sources of meaning and ethical values. Where religion is having a resurgence in Europe, it is generally tied to a resurgence of racism, sexism. national chauvinism and frequently even blatant fascism. Put bluntly, religion has repeatedly proven itself to be as worthless in the search for spiritual meaning and ethical values as it is in inquiries about the ways that the natural world functions. How could it be otherwise when it originated as a tool of the ruling class for suppressing free exploration. I can't help but wonder how someone as erudite as Gould, with a broad knowledge of cultural and creative phenomena, could have failed to notice a delightfully open-ended realm for exploring what he calls "spiritual values".* I am speaking of the realm of poetic wonder.

As far as anyone can tell, human beings have never encountered the world around them in a purely utilitarian way. There is a basic human interaction with "nature" that has been called the marvelous, poetic wonder, etc. Religion and myth spring out of social necessity and are, thus, utilitarian in nature, Poetic wonder is evoked by the encounter of the unique indiviudal with external and internal nature. It is the process of making the world one's own. The origin of poetic wonder in the individual and her specific, unique encounters guarantees its openness . Once it gets transformed into a closed system, the poetry and the wonder wither. But its openness, its basis in the unique individual and its relational quality make it an ideal basis for an ever-changing, expanding, exploratory and experimental source of meaning and values, a true terrain for an ongoing search, always satisfying, but never satisfied.

Unlike religion, poetic wonder is grounded in the material world. It does not push wonder, joy and ecstasy into an invisible realm but rather bases them in concrete relationships that we develop here. Certainly, these relationships can spark imagination, the capacity to see beyond what is here, but this "beyond" is not a separate realm, but rather an expression of possibilities, whether those of the world or of our own minds. William Blake said it well in "Auguries of Innocence":

"To see a World in a Grain of Sand
And a Heaven in a Wild Flower,
Hold Infinity in the palm of your hand
And Eternity in an hour."

This relationship has also been describes like this: "We can term a relationship with (external or internal) nature one of 'wonder' if it does not reproduce nature or the individuals who are involved in it". Here we see the non-utilitarian nature of this relationship. The description continues: "By integrating nature as an element of their unique individuality, individuals make another reality appear, one which is not a social reality, but

rather their own reality. Constantly hidden behind the former, the latter reality cannot appear when the realistic criteria inherent in every society are in place, but only as a sense of wonder that is more or less poetic." This essentially individual nature of poetic wonder, its opposition to social realism, is of major importance in terms of the question of the creation of meaning and, consequently of ethical values.

There is no evidence that the universe or life have any inherent, universal meaning. Rather it seems that all existence is contingent, an accident. Thus, any meaning that exists is created by accidental beings; it is contingent. Socially created meaning will direct itself toward maintaining the society from which it springs. Thus, it will tend to present itself as universal and constant, as inherent in the structure of nature, rather than as contigent and historical. This is religion, and obviously it tends toward dogma and the perception of ethical values as absolute and universal moral laws. On the other hand, when individuals take the creation of meaning into their own hands, its contigent and relational nature becomes evident. This creation is never completed, but is a continual search, an ongoing journey. It doesn't rest upon belief, upon faith, but rather on exploration, experimentation and questioning.

Social meaning, in the form of religion or, in modern times, ideology, demands absolute acceptance. But it is not capable of satisfying. This is why it must be accepted by faith, as a belief. Its promise will be fulfilled in the future--perhaps of an afterlife, perhaps in a future "realization" of history....

The search for meaning on the individual level, in poetic wonder, makes no promise of ultimate satisfaction, of providing a final answer. Paradoxically, precisely for this reason, it is immediately satisfying, encompassing a fullness of the moment that transforms that moment into an eternity. When I taste the minty iciness of the full moon, drink the warm, golden sweetness of the sun, feel soaring, wild freedom of the hawk running through my veins, in that moment I feel an overflowing fullness, an expansive generosity that needs no tomorrow. And yet, I gladly embrace tomorrow, precisely because it allows me to express my generosity, to empty myself and fill myself back up again...

In saying this though, I don't want to be misunderstood as denying the existence of an objective realm. The relational nature of poetic wonder has its basis in the fact that it is an encounter with an outside.** This outside has traits about which human beings can develop a shared understanding--if they can overcome the social biases that assume "universality" for a specific society. This is the realm of that which Gould calls "the factual state of the natural world"--the realm he grants to science.

As I pointed out above, modern science has its foundations in an essentially religious concept: the idea of universal natural laws. This idea has its origins in the belief that a divine person created the universe and inscribed such laws into it. It was made the basis of modern science, because the early modern scientists of the Renaissance were good christians, and the methods of science had to have some assumed foundation from which to operate if they were going to be able to create a usable understanding of the world. The transformation of god into universal Reason in the Enlightenment was simply a secularization of the christian concept, not its eradication.

Despite the fact that modern science has its foundation in an assumption that originates in the closed system of religion, its method of operation, at least ideally,***--observation and experimentation--is supposed to be open-ended, encouraging ongoing exploration. But its grounding in a basically closed conception of how the universe operates (and its dependence upon funding from the state and corporations) keeps this exploration within specific boundaries, preventing scientists from seeing certain uncomfortable realities.

This leaves me to wonder how one might explore the objective realm, the external reality that we all encounter, developing methods of observation and experimentation that operate from a different basis, an

open, poetic and relational basis.

The most essential change this would make is that it would do away with the concept of universal, rational natural laws, and with it the essentially quantified, mechanistic view of the world. This does not throw the universe into a state of absolute contingency, of total randomness, but it does significantly increase the importance of contigency, of the element of chance, in the world we encounter. But as in human relationships, in the relationships that make up the universe in which we live, there are habits, general tendencies, ways things usually go, and there are qualities inherent to certain beings and relationships--qualities that define them. But these are not laws; they are traits, characteristics, relational forms that belong to the beings involved in the particular relationships, not to the universe. We can certainly come to understand such qualities through observation and experimentation, but through a different sort of observation and experimentation: one in which we make no pretense of being objective, of being an external spectator, but rather passionately encounter the beings of this world, immersing ourselves fully into the life of our world, which would then appear to us as a Wonderland.

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* I am not convinced that there is any reason to use the term "spiritual" in any positive sense anymore. It is no longer necessary, if it ever was, to turn to god or a spiritual realm to explain any reality we encounter. If we continue to use to speak of "spirituality" or "spiritual meaning' in any positive sense,it is necessary to create clear, new meanings for these terms that wrench them from their religious significance with its assumption of a separate spiritual realm. I personal prefer to find other words that don't have such implications. Like the marvelous, the poetic, wonder....

** This opens questions relating to the nature of the external and the internal, and of consciousness as the place where the two meet.

***Thomas Kuhn and other recent philosophers of science have shown how science generally operates as a closed system, requiring ruptures to create openings for new ideas and information to get in.

Abhishek Upadhayay says

This was first of its kind on my reading shelve. Extremely difficult to swallow in the beginning and to adjust to author's style of writing. Recommended only if you are interested in natural history.

Jason Adams says

Published months before his death, "I Have Landed" represents the capstone on thirty years of science writing by Stephen Jay Gould. As such it features all of his top hits: punctuated equilibrium, evolution vs. creationism, and the misuse of science in racist ideologies. Having now read his entire collected essays, I can say that very few scientists are able to bridge the gap between the technical and popular with such clarity of thought. A last morsel of an inquisitive mind, a great book.

Mónica Mar says

La ciencia se inmiscuye en todos los resquicios de nuestras vidas: la luz que incide en la retina; el impacto de un libro contra el suelo; el hierro en la sangre y el calcio en los huesos, todo, todo tiene una explicación, aun cuando no un propósito. Incluso la religión es una especie de tótem opuesto a ese pulpo inconmensurable que es la ciencia, un tótem más macizo para unos, más endeble para otros. Y pese a la universalidad de la ciencia, no todos tenemos las aptitudes para ser científicos. Y ello es quizá uno de los aspectos más bonitos que tiene: es menos maleable que las artes y las humanidades; no podemos, presas de un capricho, decidir que somos físicos o biólogos o entomólogos como decimos que somos escritores o fotógrafos. La ciencia no es incorruptible, pero sí es menos propensa a la perversión, quizá no de ideologías, pero sí al menos de manos ociosas.
Regina Spektor es una cantante, pianista y compositora ruso-americana. Tiene unos dedos bastante diestros para las teclas de un piano, y una voz melodiosa, pero es una compositora extraordinaria. Tiene la habilidad de contar historias con sus canciones, y no solo las suyas, sino la de diversos personajes tanto reales como de su invención. Para mí, Spektor no es una compositora: es una escritora. El motivo por el que la menciono es por que la primera vez que leí a Gould, no pude evitar la asociación, la comparación. Gould fue un paleontólogo que escribió 300 ensayos para la revista Natural History además de varios libros, y, como Spektor, tenía tal destreza para las letras que resulta casi elegante su forma de deslizarse entre ciencia y arte. Gould no era ningún diletante con delirios de escritor, Gould era un científico con arista de poeta. No es fácil conjugar campos, pero Gould se las arregló para tender un puente entre el rigor casi abstracto de la paleontología y la biología y la calidad de una narrativa ágil y enganchadora. No digo que haya que ubicar a Gould en la categoría de literatura de las bibliotecas, no. Lo de Gould era la ciencia. Digo que la proeza de Gould, como la de Sagan y la de DeGrasse Tyson, fue la de enseñarle al público que la ciencia es omnipresente, ominsciente, pero no necesariamente inalcanzable, intocable. No tiene sentido erigir el conocimiento como una réplica del credo religioso. Y la prosa científica es tan a menudo engorrosa y aburridora. Gould no la desmenuza ni la rebaja; lo que hace Gould es amasarla en textos que no son simplemente digeribles, sino en lecturas agradables, en historias ricas en detalles.
Lean a Gould.
Ah, y escuchen a Regina Spektor.

Samuel says

Gould is one of the all-time great essayists, and this final volume of his work in the form is well worth picking up.

Some of the essays are as good as anything he ever wrote -- I'd point at the title essay, "The First Day of the Rest of Our Life," and "The Great Physiologist of Heidelberg" in particular. Others, especially the shorter ones not written for Natural History magazine, are a bit thin. Still, the good definitely outweighs the less good.

The final section, a quartet of essays written in response to the September 11th attacks, is both beautiful and deeply, deeply sad. Gould died less than a year after the attacks; it was a tragedy to lose him, but in some ways, it's almost a mercy that his vision of the generosity of the people of Halifax, his gratitude for the bravery of rescue workers and those that support them, and his call to "record and honor the victorious weight of these innumerable little kindnesses," never had to run headlong into the unjustified quagmire of the

Iraq War, the rise of Islamophobia, and the apotheosis of human crudity that is Donald Trump.

All in all, a fitting end to one of the great literary careers of the 20th century.

Juanita Rice says

Numerologists would boggle at this book's various numerical coincidences, as does Gould himself. First, as the title suggests, this is the last of his books of essays from the journal Natural History. It is also neatly the tenth such book. Moreover, there were exactly 300 such essays, one published in every issue for 30 years, with not "one missed," as Gould says, "despite cancer, hell, high water or the World Series." There is also a quarter-century between his first popular book and first scientific book in 1977, and this book and a new major scientific title in 2002.

And then--numerologically speaking>-- there is the fact that January 1, 2001, the date of the last essay, was the first day of the new millennium. And that essay was the title essay for the book, and celebrated a personal centennial: Gould's grandfather arrived, a young Hungarian immigrant, in NYC in 1901. In Gould's library was a book of his grandfather's, an English grammar with an inscription celebrating the day: "I Have Landed, Sept. 11, 1901."

While the book was being prepared, that date sadly took on a different and opposite connotation for Americans, so a separate section was added at the end of I Have Landed to balance the celebratory opening.

And as a final coincidence, one completely unforeseen, in 2002, Gould died swiftly of a previously unsuspected cancer, so that the title I Have Landed: The End of a Beginning in Natural History could also be the title of a sober eulogy. The dedicatory invocation at the end of the first essay, especially, takes on haunting connotations: "Dear Papa Joe, I have been faithful," it begins, and it concludes, "I have landed. But I also can't help wondering what comes next."

All this is irrelevant to the content, but I pass it on because in pursuing my intention to read all of the books of Stephen Jay Gould I have developed such respect and gratitude for his devotion to the task of educating the non-scientists of the world without patronizing or simplification that his death at the comparatively young age of 60 still saddens me, ten years later. He was that rare thing in America today, a public intellectual with wealth of knowledge plus a passion for a just, rational and humane world. I also have developed that most dangerous of reviewer attitudes, an odd kind of personal liking, and even, on occasion, irritation with his quirks and imperfections. He is so overt, so open, and so enamored of his sense of humor, his delight in the 'signifying' detail, his classicism, and his antiquarian books. We can ill spare him.

The great value of the book, of course, is impersonal and extensive: it consists of intelligent and articulate writing, a passion for explication, thorough knowledge of science and the history of science, almost the history of knowledge. With Gould, every fact becomes a doorway to an interconnected universe, and as one reads, these connections light up illuminating previously concealed significance. I'll take, for instance, his acute ability to find concrete examples of his perhaps favorite theme, that of the often invisible influence of social assumptions and hidden preconceptions upon the conclusions of scholarship, including the sciences. As Gould tries again and again to persuade readers, when something just "feels right," then the need to examine one's premises and reasoning is even more imperative. What it "fits" may be something completely unrealistic.

In an essay called "Jim Bowie's Letter and Bill Buckner's Legs," Gould examines two very different examples of the way facts can be—and are—blinked in the human need to make events conform to a pre-existing mental idea or pattern. At the site of the Alamo, Gould found a letter written by Bowie to the Mexican general Santa Ana exploring a negotiated surrender. This letter contradicts the popular legend that Bowie joined his impulsive co-leader William B. Travis (widely recognized as impetuous and vainglorious) in declaring the intention to fight to the death rather than surrender or escape. The letter is prominently displayed in glass at the historical site in San Antonio, Texas, but official information–even in the Tom Wolfe novel, A Man in Full—maintains the legend. Gould points to this example of myth-perpetuation with contrary evidence "hidden in full sight," as only one small example of what he ventures to call a trait of the human brain, its operation as a device to recognize patterns. Depending on the patterns generated by the beliefs and fables of a society, its members will tend to see facts through a selective bias that pushes the facts to fit the patterns.

But it's not just patriotism or heroic great-men narratives that are so influenced. The second example in this essay deals with a sports myth: that of the catastrophic failure of Boston Red Sox first-baseman Bill Buckner to snag a grounder to end a ninth inning in a sixth World Series game in 1986 that –had the Sox won—would have brought them their first World Series ring since 1918. And had Buckner picked up the ball, the Sox would –well, that's the point at which the "story" ignores the facts: they would only not have lost yet. The score was already tied. Had Buckner gotten the third out, the game would have continued into extra innings. And that's Gould's point. The Mets had already gained their two-point deficit.. So if Buckner had picked up the grounder, and stepped on first base, there's no guarantee that the Sox would have won.

How did the story come about that Bill Buckner "lost" the game for the Sox, and "lost" the Series? This was, as I said, the sixth game. For you who don't follow American Baseball, a World Series is the last round in a series of playoffs. The two teams play for the best of seven games. So at least four games must be played. The Red Sox had already won three games by this game, the sixth in the 1986 series, so if they had won the game, the World Series would end with them the champions. But even if they lost this game, there was still a seventh game to play. How did one play in the sixth game "take away the Series"?

Gould collected the evidence of this revisionist history—much of it in sports journalism,
where writers seldom have time to track down details of apocryphal stories that "everyone knows." The revelatory fact, however, is that the story of Buckner's Disaster occurs also
in "rarefied books by the motley crew of poets and other assorted intellectuals who love to treat baseball as a metaphor for anything else of importance in human life or the history of the universe." (Gould himself has used baseball as a major metaphor, in Full House, an investigation of how statistics are so poorly understood that evolution can be seen, wrongly, as a story of increasing complexity, and therefore an inherent dynamic with humans as the apex.)
As he says, "something deep within us drives accurate messiness into the channels of canonical stories, the primary impositions of our minds upon the world." Neither story, perhaps, is of great importance, but these "common styles of error—hidden in plain sight, and misstated to fit our canonical stories—occur as frequently in scientific study as in historical inquiry."

I will add that because they "fit" patterns, these fictional versions of reality are widely employed in political discourse. If you want to persuade people, and animate them to emotional investment in political decisions, you can't bother with the "accurate messiness" of reality. For instance, yes, crime has decreased as prison populations have increased, for instance, but there is not a one to one correspondence from state to state, or in types of crimes, or even over time. That two phenomena co-occur is no clue to causation. And yet, how does one answer false conclusions?

Then we must also deal with the problems caused by who writes or concocts the stories we hear. It is true that the victors tell the world their version of what happened. And so we think that what is coincides with what ought to be; might therefore creates right. History, sociology, psychology, as well as science, are all infected with this seemingly inevitable "silly and parochial bias." Thus we read of the first land animals as having been "a conquest," and hear the story that dinosaurs were "doomed" to fall "in favor of" the triumph of mammals (us). But fish still constitute a good 50% of all vertebrates, those lucky victors on land not having gained any advantage (yet). And dinosaurs only died because of a once-in-known-history collision of an extraterrestrial object with earth. Dinosaurs had held pride of place for over 130 million years. Mammals didn't "vanquish," but were an accident of history, "for reasons. . . that probably bear no sensible relation to any human concept of valor"or " intrinsic superiority."

All this is a summary of the meaty gist of just one essay among thirty-two, dealing with everything from Gilbert and Sullivan to theories of human race, from the mosaics at San Marco in Venice to the landscape paintings of Frederic Edwin Church, from Freud's evolutionary fantasies ("the penis as a symbolic fish, so to speak, reaching toward the womb of the primeval ocean") to Nabokov's "other" vocation as a lepidopterist, and several analyses of racism both toward Jews and blacks ("Age-Old Fallacies of Thinking and Stinking").

Especially because this book was published posthumously, I must just add my regret that for all Gould's vast knowledge he never found the occasion to study Post-Colonial theory seriously, a rubric which includes gender studies, culture studies, ethnic studies, philosophy, and significant portions of post-modern thinking. He would there have found ample support for his arguments about human tendencies to think in terms of super-imposed social story forms; in general, the term in the humanities for these forms is "Master Narratives." As a historian of science, however, and –as he will humorously say, a 'white professor over sixty,'—his cultural idols remained uniquely European, and overwhelmingly male, although he recognized gender bias as one of those patterns which compromised accuracy only too often. Gilbert & Sullivan, Bach, Handel, Shakespeare: all worthy arts, but not comprising all the worthy. He admits in another book* that this Eurocentrism and devotion to European classics all too often occurs among "folks like me...who don't wish to concede that other 'kinds' of people might have something important, beautiful, or enduring to say." This generous acknowledgment of the desire of some scholars, professors, intellectuals and scientists to "maintain old privileges" is thoroughly indicative of what I, with some hesitation, call Stephen Jay Gould's intrinsic goodness; he may sometimes make light of certain vices, joking about the Baconian metaphors of "masculine science" "ravishing the formerly innocent Miss Nature," a crudity that estranges me, but he is, was, and now will always be, the quintessential man of good faith.

*The Hedgehog, the Fox, and the Magister's Pox.

Alex Lee says

Like many people, I am an admirer of Stephen Jay Gould. This collection of essays, like many of his works is full of wonder, passion and consideration. He explores many topics, researches into the history of things to show how ideas change -- and like the slow movement of geological time, so with the generations do our ideas change too. Gould muses on them, reflects on them and often presents how he thinks we can do better.

There isn't much overarching philosophy here. Gould is pretty focused on topic with each essay. He does present much of himself though, through his interests. He shows us that he is a lover of truth, life and all the wonder the world has to offer. That seems to be enough.

Charles says

I feel guilty for not liking this book. Stephen Jay Gould is brilliant and well-read and well-spoken and highly respected in both his field and as a popular essayist. But I hate this book. There's hardly an essay therein that I was able to read in its entirety. Gould is much too long-winded; couple that with a fascination for minutia and obscure historical subjects, and your eyes glaze over and you find yourself skipping to every third word (then every other paragraph, then conclusion). And frankly, Gould comes off as a little smug and pedantic, which I think is the result of his less-than-straightforward writing style. Regardless, I will take away what I feel is a common theme in his essays - ideas/phenomenon/judgments must be taken/understood/made in context, something that far too many people do not consider.

Kathryn says

This is the tenth and final collection of essays from Stephen Jay Gould, with most of these essays coming from his regular monthly essay in *Natural History* magazine. And I am quite sorry that I have read all of the collections, for that means an era has ended in my reading life. But these essays in this current volume, most having to do with some aspect of natural history and / or evolution, are very good, and in some cases, very personal; and I recommend this book without reservation.

The title of the book comes from his maternal grandfather's English grammar book, that his grandfather began studying as soon as he got off the boat at Ellis Island; after learning some English, his grandfather wrote in the book, "I have landed, September 11, 1901." After the introductory essay (which discusses his grandfather, and continuity), most of the rest of the essays concern Gould's usual subject of evolution and all aspects of natural history.

The author has a certain sense of humor, revealed by the titles of his essays, which include *No Science Without Fancy, No Art Without Facts: The Lepidoptery of Vladimir Nabokov*, *Syphilis and the Shepherd of Atlantis* (on how the disease was named), *What Does the Dreaded "E" Word Mean Anyway?* (on the choosing of the word 'evolution' for Darwin's theory), and *An Evolutionary Perspective on the Concept of Native Plants*. Several essays deal with continued attempts to remove the teaching of evolution from American schools, and how Gould is mystified as to how people could feel personally or spiritually threatened by the theory of evolution. (When he died, in 2002, the Creationist trend was dying, but the Intelligent Design trend was gaining steam.)

He ends this collection with four short essays, having to do with his personal response to the events of September 11, 2001, and noting how acts of kindness are what save this world from despair. And I may, at some point, have to return to the first of his books of essays from *Natural History* magazine (*Ever Since Darwin*, 1977) and begin reading them all over again.

Sandra says

Not for the faint of heart: these assorted short essays explore a variety of scientific and ethical topics. Gould liked to use simultaneous stories from two or more seemingly unrelated fields to explore deeper truths

common to both. The book begins with the coincidence that his grandfather landed in the United States on 9/11/1901, exactly 100 years prior to the horrendous attack on the Twin Towers.

Gould defends the tedious rigors of biological taxonomy and its contribution to the advancement of science against enthusiasts who would glorify the role of sheer creative inspiration. He is fascinated by all matter of weird speculation and crossovers between science and theology and science and literature. He is an advocate for precision and tireless research both in science and history. The book is a wonderful tribute to Darwin, Linnaeus and a handful of other scientists and thinkers whom Gould admired.

Jennifer says

I loved the ideas and content of the essays, as well as the so many facts and observations enriching them and the so many relations presented between science and many other fields (arts, history, anthropology...), but found Gould's writing quite dense, quite often. So, despite loving the content, I didn't enjoyed the whole reading process as much, which resulted in turn in a long procrastination to finish the book.
The book is divided into 9 sections, throughout most of which (but not in all) evolution is a center piece. My favorite section was the 8th ("Natural worth"), with a couple of essays that went over the role of scientific theories on racism.

Jen says

I don't think I would have found this book as fascinating if the author were not such a skilled writer. I think I said this in my last review, but he has to have been the most well-rounded man on the planet. He has such a wide range of knowledge: science, of course, Russian literature, landscaping, baseball, Gilbert and Sullivan, the Alamo, etc. He is my new answer to the question, "If you could invite one person, living or dead, to dinner who would it be?" And his essays on September 11, where he points out (scientifically, of course) that there is more good in the world than evil, are beautiful.
