"Creation," a Film by Jon Amiel

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You've killed God, Sir. You have killed God." So says Thomas Huxley (Toby Jones), almost gleefully, to Charles Darwin (Paul Bettany) early in this beautifully made film, which explores the personal turmoil Darwin endured in bringing to fruition one of the greatest intellectual achievements in the history of our species: the theory of evolution by natural selection.

Jones, who played Karl Rove in "W," has gone from Bush's Brain to Darwin's Bulldog in a brief but effective turn that sets the stage for director Jon Amiel's sensitive portrayal of the Victorian-Era conflict between Darwin's shattering, far-sighted science and the resting inertia of religious dogma. "Science," according to Huxley, "is at war with religion," and Huxley and Joseph Hooker (Benedict Cumberbatch) here see Darwin's revolutionary work as a powerful – even decisive – weapon in that struggle. But despite his growing disaffection from religious belief, Darwin does not relish the prospect of being the prime mover in dismantling what he sees as "a society bound together by the Church," especially given that his beloved wife, Emma (Jennifer Connelly), finds such comfort therein.

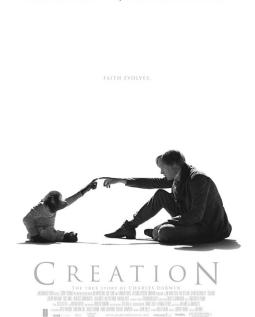
Adding to his worries about Emma's reaction to his revolutionary ideas, Darwin, cautious to a fault in the view of Huxley and Hooker, is not convinced that he has sufficient evidence to support his central thesis. These twin dilemmas compound Darwin's anguish over the death at age 10 of his and Emma's oldest daughter, Annie, played by young Martha West in a terrific performance made all the more remarkable by the weight her character shoulders in this drama. In the movie (but certainly not in real life) Annie appears to Charles after her death as a recurring spectral interlocutor, the sometimes-heated dialogues with her father serving to illuminate his science, his concerns about Emma ["(This book) would break your mother's heart"], and even his feelings of guilt about Annie's death.

This considerable angst could only exacerbate the mysterious illness that plagued Darwin for virtually all of his adult life and for which he made periodic sojourns to Malvern, a trip of 150 miles each way, for hydrotherapy under the guidance of Dr. James Manby Gully, who diagnosed Darwin's chronic digestive problems as "nervous indigestion." The depictions of these water treatments in "Creation" are enough to make one opt for root canals as an alternate.

Convinced that Annie had inherited his own malady, Darwin took her to Malvern in March 1851 in the hope that Dr. Gully's treatment would help. Annie died there about a month later, a "bitter and cruel loss," as Darwin told his cousin William Darwin Fox.² For Darwin, according to biographers Desmond

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"Creation," Recorded Picture Company, BBC Films, and Ocean Pictures Distributed in the United States by Newmarket Films, 108 mins. "Creation" is rated PG13. It includes some scenes that might upset young children: Annie's death, a bitter (and likely uncharacteristic) argument between Charles and Emma, and a graphic encounter between a fox and a rabbit, with the latter as a victim of natural selection in action. There is also a muted and tender bedroom scene (Scientists have sex!? Who knew?) that does not begin to approach the gratuitous trash any child can see on television any day of the week.



IENNIFER CONNELLY

Poster for the Film "Creation" by Jon Amiel.

and Moore, the death of his favorite child "put an end to three years' deliberations about the Christian meaning of mortality and opened up a fresh version of the tragic contingencies of nature."²

Events in "Creation" sometimes occur a bit out of true historical sequence, owing to flashbacks and Annie's posthumous interludes. Annie's death, for example, seems to occur in proximity to the arrival of the 1858 letter from Alfred Russell Wallace that at once left Darwin crestfallen and galvanized him to action, with help from friends and colleagues. Wallace, an accomplished naturalist who had been studying and collecting in the Malay Archipelago, sent Darwin a 20-page abstract of his ideas about natural selection, a summary that seemed to anticipate the essence of Darwin's own, long-delayed book. "Creation" shows Darwin bereft, convinced that his life's work has been preempted by Wallace and his own procrastination. The film does not depict the solution that his influential friends Hooker and Charles Lyell (the famous geologist, not shown in the film) constructed to preserve Darwin's claim to priority: a reading at the Linnaean Society, on 1 July 1858, of Wallace's letter and excerpts from essays and letters Darwin had written in 1844 and 1857. Thereafter, Darwin began work in earnest on his masterpiece, On the Origin of Species by Means of Natural Selection, which sold out on the first day of its publication, 24 November 1859.

But errors in chronology are of little consequence here. "Creation" is a drama, complete with much dramatic license (except where the science is concerned). The film is not in-



Still from upcoming Jon Amiel film: "Creation." Photo Courtesy of Newmarket Films.

tended as a documentary about Darwin's work, though we do see glimpses of the meticulous scientist—the famed notebooks, the extensive breeding experiments on pigeons, and references to eight years' painstaking work on barnacles—reminders of the decades of effort and the stunning amounts of data that Darwin brought to the "long argument" that is *The Origin*. The film also reminds us of Darwin's brilliant strategy to begin *The Origin* with a chapter on "variation under domestication" and the power of artificial selection, phenomena that people everywhere in his native England recognized. "Man selects for appearance," says Darwin, "nature selects for survival," the latter operating on naturally occurring variation over immense periods of time.

Though a contemporary of Mendel, Darwin never was able to explain the source of that variation or the mechanisms for its transmission from one generation to the next, but "Creation" shows that his lack of familiarity with the principles of heredity did not stop his pondering the implications of consanguineous matings. "Perhaps we should never have married; our blood was too close," he tells Emma, his first cousin, after Annie's death, in a poignant scene whose depth of feeling must have benefited greatly from the real-life marriage between Bettany and Connelly.

"Creation" contains much detail that will please Darwin aficionados, but it is not a film only for the cognoscenti. It is an excellent drama that gives us Darwin as a man, and a relatively young one at that – a loving husband and father, a good friend and colleague, and a respected member of his rural community. This treatment is a welcome departure, not least because it might soften the iconic image of the severe, aged naturalist who has stared out at us from the covers and pages of so many books—especially in the year just past, the bicentenary of Darwin's birth and the 150th anniversary of the publication of



Still from upcoming Jon Amiel film: "Creation." Photo Courtesy of Newmarket Films.

The Origin. One hopes that at least some of those who reject evolution outright—an unfortunately large percentage of the American public—will choose to see this helpful corrective to creationist caricatures of Darwin as the embodiment of evil. The demonization of Darwin himself is but one aspect of formal and informal religious and political enterprises that use fear and willful misrepresentation to discredit evolution, producing, for example, scabrous attacks in intellectually bankrupt movies such as "Expelled: No Intelligence Allowed," which promotes intelligent-design creationism and attempts to tie Darwin's ideas to the Holocaust.

The financial threat of boycott by a populace held hostage to ignorance likely explains why "Creation" struggled to find an American distributor, despite the film's having been selected for the 2009 Tribeca Film Festival and as the opening entry for the 2009 Toronto International Film Festival. Newmarket Films was courageous in signing on to make the film available in the U.S., and one wishes the film a large audience as a reward.

Readers of this journal know intuitively the inextricable connections between genetics and evolution. "Creation" reminds us of the debt our field—indeed all of biology—owes to the reclusive genius who fought tradition and his own misgivings to help us see the living world in all its natural glory, and who, as the film's end notes remind us, "was buried in Westminster Abbey with full Christian honors."

Genetics in Medicine does not have a rating system for films, but I give "Creation" three bases.

REFERENCES

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