

**Hans Barth**

**Agassiz's Legacy?  
Elizabeth H. Gladfelter's  
U.S.-Geschichtsblindheit.**

### **Zusammenfassung.**

Im Jahre 2002 veröffentlichte die Meeresbiologin Elizabeth Higgins Gladfelter ein 437 Seiten dickes Buch. Titel: *Agassiz's Legacy. Scientific Reflections on the Value of Field Experience.*

Die Autorin, Meeresbiologin und Ausdauer-Sportlerin, interviewte 52 Naturwissenschaftler, die allesamt dies gemeinsam haben: zu ihren Arbeitsmethoden gehören Feldstudien. Und das war ihr Pech. Denn obwohl kein einziger von ihnen auch nur den Namen "Louis Agassiz" erwähnte, wurden sie alle von Frau Gladfelter zu Agassiz' Erben degradiert.

Die simple Idee der Autorin: da Agassiz einigen Wert auf Feldstudien legte, sei jeder Wissenschaftler, der dies auch tue, eben ein Erbe des Louis Agassiz. Ueber Agassiz selbst weiss die Autorin fast nichts. Das Studium der Natur sei ihm wichtig gewesen und in seinem Todesjahr, 1873, habe er Sommerkurse abgehalten, in denen es viel ungestörte Gelegenheit gab, die "Natur" zu studieren und sich mit Agassiz auszutauschen. Und das sei schön gewesen und ein Modell für die Zukunft.

Kein Wunder, dass der gefällige Literaturwissenschaftler Christoph Irscher glaubt, in Louis Agassiz gleich dem "Creator of American Science" begegnet zu sein und sich dabei u.a. auf Frau Gladfelter beruft: offensichtlich ohne jemals einen kritischen Blick in Gladfelters Buch geworfen zu haben. Tatsache ist, dass die amerikanische Wissenschaft nur mit knapper Not und vielen Brandspuren dem "Cremator of American Science" entkam.

Nachdem sich Frau Gladfelter - in einem Brief von meiner Seite - ein wenig mit dem Mann bekannt gemacht hatte, mit dessen bedeutendem Namen sie ihre vielen Interviews verkauft, wollte sie sich nicht weiter die Finger verbrennen und nahm einen nicht näher präzisierten Abstand vom Erbe des Louis Agassiz.

Die Moral von der Geschichte: wer erdrückende Schulden vermeiden möchte, der sollte sich die Erbmasse immer und vorher genau ansehen.

Und im Falle von *Agassiz's Legacy* nicht zögern mit einem klaren : Nein, Danke!

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Dr. Elizabeth Higgins Gladfelter  
Marine Policy Center  
Woods Hole Oceanographic Institution  
Woods Hole, MA 02543

Fribourg, 16th of December 2012

Dear Mrs Gladfelter,

In your book "Agassiz's Legacy"<sup>1</sup>, you praise the Swiss born naturalist and Harvard professor Louis Agassiz for his method of scientific research and teaching, which you find exemplary. Moreover, you consider a great number, if not all, of today's field researchers as Louis Agassiz's "heirs". With regard to the future, the pressing question should be - as you put it - : "Are we currently producing the next generation of Agassiz's heirs?"

My question: why do you combine your sound and convincing arguments for field experience in the natural sciences with an homage to Louis Agassiz (1807-1873), an incorrigible proponent of creationism, catastrophism, polygenism and terrifying racism?

Your description of Agassiz's scientific method starts with the famous slogan: "Study nature, not books!" Besides "firsthand field experience", you mention : "a supportive social climate" offered by Agassiz to students, i.e. "the opportunity to interact on a daily basis with Agassiz, other distinguished natural historians of the day, and his own peers in a positive setting where new observations and discoveries, made in the field, were greeted with enthusiasm and critically discussed."<sup>2</sup>. This might have been the case in Agassiz's summer course on Penikese Island in 1873.

You omit to tell the reader that this paradisiacal situation is not the one Louis Agassiz is known for. Agassiz's relation with students was not so very "social", or - as Clark A. Elliot puts it: "[...] Agassiz tended to patronize his students, Wyman [famous Harvard professor, H.B.] treated them from the first as equals and encouraged their independence."<sup>3</sup> In fact, Agassiz had very serious problems with students and collaborators, first in Switzerland [De Charpentier; Schimper; Forbes; et al.] and later in the U.S. [Desor; Verrill; Clark; et al.]. You describe "a supportive social climate" while Agassiz's students complained about a "French, Louis Napoleonic-tyrannic-Papalistic set of regulations"<sup>4</sup> issued by Louis Agassiz. Throughout his academic career he had to face substantiated accusations of plagiarism.<sup>5</sup>

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<sup>1</sup> HIGGINS GLADFELTER, Elizabeth (2002) : Agassiz's Legacy. Scientific Reflections on the Value of Field Experience. Oxford University Press : New York, 2002. 437 pages.

<sup>2</sup> ibd. p. 7-8

<sup>3</sup> ELLIOTT, Clark A. & ROSSITER, Margaret W. (1992) : Science at Harvard University. Historical Perspectives. Associated University Press : Cranbury, 1992. p. 108.

<sup>4</sup> WINSOR, Mary Pickard (1991) : Reading the Shape of Nature. Comparative Zoology at the Agassiz Museum. The University of Chicago Press, 1991. p. 60.

<sup>5</sup> ibd. p. 43-65.

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Surprisingly, your presentation of Louis Agassiz's research method lets the reader in the dark about important elements of Agassiz's legacy, elements that could/should decide today's researchers to reject this heritage to a large extent.

Let me remember some of these facts.

As a biologist, Louis Agassiz studied "nature", but not always the natural "nature". He found that God himself had created every single species separately, not only once, but also many times anew, after catastrophes that destroyed all life on earth. Louis Agassiz "method" was called "platonic" and "natural theology"<sup>6</sup>, not the kind of science we need for our future. Agassiz also found through a "method", which you recommend to all future naturalists, that humanity was divided into 8 races, each of them created by God separately. He found, allegedly by studying "nature" and not books, that Charles Darwin was utterly wrong and that his theory of evolution was nothing more than speculation and nonsense.

In 1847, Louis Agassiz studied "nature" in his own way and declared in the US capital of the slave trade, Charleston S.C., that "the brain of the Negro is that of the imperfect brain of a 7 month's infant in the womb of the white"<sup>7</sup>. He later found out that "half-breeds" are almost infertile and made out of nothing more than the defects of Whites and Blacks.<sup>8</sup>

In 1865, Louis Agassiz went to Brazil and demonstrated what he meant by "Study nature, not books!". He convinced hundreds of native women and men to undress. He then photographed them. One of his most talented students, later world-renowned psychologist and Harvard professor William James was present and horrified. William James wrote: "I then went to the photographic establishment and was cautiously admitted by Hunnewell [a fellow Harvard volunteer] with his black hands [blackened presumably by the photographic procedure]. On entering the room found Prof. [Agassiz] engaged in cajoling 3 moças whom he called pure Indians but whom, I thought as afterwards appeared, had white blood. They were very nicely dressed in white muslin & jewelry with flowers in their hair & an excellent smell of pipioca. Apparently refined at all events not sluttish, they consented to the utmost liberties being taken with them and two without much trouble were induced to strip and pose naked. While we were there Sr. Tavares Bastos [a Brazilian from Manáos] came in and asked me mockingly if I was attached to the *Bureau d'Anthropology*."<sup>9</sup>

What did Louis Agassiz see in the Brazilian "field"? Here is an example of what the great researcher found: "Like long-armed monkeys the Negroes are generally slender, with long legs, long arms, and a comparatively short body, while the Indians are short-legged, short armed, and long-bodied, the trunk being also rather heavy in build. To continue the comparison, I may say that if the Negro by his bearing recalls the slender, active Hylobates, the Indian is more like the slow, inactive, stout Orang. Of course there are exceptions to this rule; [...]"<sup>10</sup>. Great method, great result.

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<sup>6</sup> FISKE, John (1873) : Agassiz and Darwinism. In: Popular Science Monthly. Vol. 3, Oct. 1873. pp. 696-697 : "The generalizations which have thus preoccupied Prof. Agassiz's mind are purely theological or mythological in their nature. In estimating the probable soundness of his opinion upon any scientific question, it must always be remembered that he is, above all things, a devotee of what is called "natural theology.""

<sup>7</sup> GLIDDON, George to Samuel G. Morton, Jan. 9, 1848. Morton Papers, LCP.

<sup>8</sup> AGASSIZ, Elizabeth CARY, (ed.) (1885) : Louis Agassiz : His Life and Correspondence. Houghton Mifflin. Boston, New York, 1885. p. 601

<sup>9</sup> Quoted in: JOHNSON, Kendall (2007) : Henry James and the Visual. Cambridge University Press : Cambridge, 2007. pp. 75-76.

<sup>10</sup> AGASSIZ, L. & AGASSIZ, E. CARY (1867) : A Journey in Brazil. Ticknor and Fields. Boston, 1867. pp. 529-530.

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Fifteen years earlier, in 1850, Louis Agassiz had already demonstrated to his peers and his students what "Study nature, not books!" meant to him. He visited slave plantations to study enslaved Africans, men and women, literally "in the field". He afterwards asked his slaveholder friends to undress the enslaved women and men and to photograph them. As a "field researcher" he used these photographs in public lectures to show that these Africans were inferior to people like him, Whites, and that they had a totally different origin. "Study nature, not books!" was a slogan Louis Agassiz used not only to study fishes, but also to give his criminal research activities a touch of science. Later, other "field researchers" followed Agassiz's unethical model of scientific research and studied victims of Nazi terror in concentration camps.

Agassiz's "method" was called "scientific racism"<sup>11</sup>. Real science seems to be something different.

Let me quote renowned historian of science, Mary Pickard Winsor who says: "Because our standards of scientific writing demand the careful exclusion of religion, Agassiz's frequent reference to the one God, the Divine Intellect, and the plan of the Creator make it hard for us to read his "Essay" as part of the history of science. In fact, the standards of Agassiz's own day allowed only brief reference to the Creator at the beginning or end of a proper contribution to science. Natural theology was regarded as a separate discipline, and Agassiz was conscious that his treatment would seem improper to many of his peers."<sup>12</sup>

The Vice-President of the "Comité Français d'Histoire de la Géologie", Prof. Goulven Laurent, writes about Agassiz: "Today, his approach to Nature is foreign to us and it is, to my understanding, **anti-scientific. As it was already in his time.**"<sup>13</sup> (My emphasis/my translation.) Already in his time ... Yes, Agassiz's colleague and botanist Asa Gray or anatomist Jeffries Wyman clearly saw the harm done by Louis Agassiz to Harvard and science in general: Wyman "thought Agassiz was stubborn and wrongheaded in his science, that his domination of the scientific school had turned it into a second-rate institution"<sup>14</sup>. What to think about a research method that allowed Louis Agassiz to reject the *Origin of Species* from its year of publication (1859) up to the end of his own life (1873). If American scientists had followed Louis Agassiz, it would have been the end of science in America!

Yes, Louis Agassiz had "heirs", had students who followed his "method" and you mention in particular two of them: Nathaniel Shaler and David Starr Jordan. The palaeontologist and geologist N.S. Shaler became Harvard's Dean of Science. His scientific method - which he learned from Louis Agassiz - can be verified in his text "The Negro Problem"<sup>15</sup> (1884), a horrifying racist stupidity. David Starr Jordan was - just like Agassiz - a leading ichthyologist; he became president of Stanford University. Agassiz's legacy can be admired in David Starr Jordan's "The Blood of the Nation. A Study in the Decay of Races by the Survival of the Unfit."<sup>16</sup> (1901, 1902 and 1910). This same Davis Starr Jordan served in 1910 as chairman of the "American Breeder's Association - Eugenic Section", with criminal C.B. Davenport,

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<sup>11</sup> MENAND, Louis (2002) : Morton, Agassiz, and the Origins of Scientific Racism in the United States. In: The Journal of Blacks in Higher Education. No. 34 (Winter, 2001-2002), pp. 110-113.

<sup>12</sup> WINSOR, Mary Pickard (1979) : Louis Agassiz and the Species Question. In: William Coleman and Camille Limoges (eds.), Studies in the History of Biology, vol. 3. Johns Hopkins University Press : Baltimore, 1979, p. 103.

<sup>13</sup> LAURENT, Goulven (1979) : Louis Agassiz (1807-1873) : Fixisme et Idéologie, ou les raisons de croire au Fixisme quand on en a soi-même ruiné les fondements. In : Travaux du Comité français d'Histoire de la Géologie - Première série - (1979)

<sup>14</sup> ELLIOTT, Clark A. & ROSSITER, Margaret W., op. cit. p. 108.

<sup>15</sup> SHALER, Nathaniel Southgate (1884) : The Negro Problem. Atlantic Monthly 54, Nov. 1884.

<sup>16</sup> JORDAN, David Starr (1901) : The Blood of the Nation. A Study in the Decay of Races by the Survival of the Unfit. Popular Science Monthly, Vol. 59, May and June 1901.

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another of Louis Agassiz "heirs", as secretary. They established the Eugenics Record Office, headed by Harry Laughlin. In their mission statement, Davenport writes down the project of a crime against humanity: "Society must protect itself; as it claims the right to deprive the murderer of his life so also it may annihilate the hideous serpent of hopelessly vicious protoplasm. Here is where appropriate legislation will aid in eugenics and in creating a healthier, saner society in the future"<sup>17</sup>. James A. Tyner comments: "A decade later, Adolf Hitler would echo these sentiments in his book *Mein Kampf*."<sup>18</sup> One can't be astonished to see that Davenport remained in close contact with Nazi researchers till 1940. To make their racist ideas more credible, Davenport<sup>19</sup> and Nazi researchers (like Fritz Lenz<sup>20</sup>) based themselves on Louis Agassiz.

You may now understand my initial question : why do you combine your sound and convincing arguments for field experience in the natural sciences with an homage to Louis Agassiz (1807-1873), an incorrigible proponent of creationism, catastrophism, polygenism and terrifying racism?

Dear Mrs Gladfelter, I wish you and your families a happy, festive season and an exciting start into the New Year 2013!

Yours faithfully,

Hans Barth

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<sup>17</sup> DAVENPORT, Charles B. (1910) : *Eugenics - The Science of Human Improvement by Better Breeding*. Henry Holt : New York, 1910. p. 34.

<sup>18</sup> TYNER, James A. (2012) : *Genocide and the Geographical Imagination. Life and Death in Germany, China, and Cambodia*. Rowman & Littlefield Publishers : Plymouth, 2012. p. 43.

<sup>19</sup> DAVENPORT, Charles, STEGGERDA, Morris (1929) : *Race Crossing in Jamaica*, Carnegie Inst. Wash. Pub. p. 469.

<sup>20</sup> BAUR, Erwin, FISCHER, Eugen, LENZ, Fritz (3. Aufl. 1927, 1. Aufl. 1921) : *Menschliche Erblichkeitslehre*. J.F. Lehmanns Verlag. München, 1936. See also: PROCTOR, Robert N. (1988) : *Racial hygiene: Medicine under the Nazis*. Harvard University Press, 1988. p. 136.

Auf diesen Brief erhielt ich am selben Tag die Antwort. Zwei Sätze:

"Thank you for your letter and extensive information...I have become aware of the very negative sides of Agassiz (and some of his students) and in no way (now or ever) want to lend any support to those despicable ideas."

Als Antwort auf meine Frage, warum Frau Gladfelter ihr Plädoyer für naturwissenschaftliche Feldstudien mit Louis Agassiz verbindet, einem unbelehrbaren Rassisten und Propagandisten abwegiger Theorien, heisst das wohl soviel wie: ich hatte keine Ahnung von Louis Agassiz und bedaure meine Marketing-Idee. Oder?

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