© Hans Barth, Das Ende der Agassiz-Legende. University of California, Berkeley.

Hans Barth

Das Ende der Agassiz-Legende.

Die University of California, Berkeley korrigiert grundlegend ihr Agassiz-Bild.

- **vorweg (p. 2-3)**
- **24.11.2010 : E-mail an Berkeley (p. 4)**
- **04.12.2010 : E-mail an Berkeley (p. 4-5)**
- **21.12.2010 : E-mail an Berkeley (p. 5-7)**
- **04.03.2011 : E-mail von Berkeley an mich (p. 7)**
- **Der alte und der neue Website-Text zu Agassiz (p. 8-14)**
- **07.03.2011 : Brief an Berkeley (p. 15-17)**
- **06.04.2011 : E-mail an mich (p. 18)**
- **19.04.2011 : E-mail an Berkeley (p. 18)**
- **19.04.2011 : E-mail an mich (p. 18)**

vorweg

Die "University of California, Berkeley" erhielt im Jahre 2010 den zweiten Platz im Shanghai-Hochschulranking, das weltweit die 500 besten Universitäten evaluiert. Seit der ersten Nobel-Preisverleihung (1901) hat die 1868 gegründete Elite-Universität 21 Nobelpreisträger hervorgebracht, von denen zur Zeit 8 zum Lehrkörper gehören.

Das von dieser weltweit führenden Universität verbreitete Bild von Leben und Werk des Louis Agassiz (1807-1873) ist auf der website ihres "University of California Museum of Paleontology" (UCMP) zu finden.

Diese Agassiz-Darstellung habe ich am 24.11.2010, dann am 4.12.2010 und ein weiteres Mal ausführlich am 21.12.2010 in Emails an das UCMP kritisiert.

Zunächst (24.11.10) bat ich darum, das Todesdatum von Georges Cuvier richtig anzugeben (statt: "April 1832", richtig: "13th of May 1832"). Auch war die Ankunft von Louis Agassiz in Paris nicht korrekt datiert (statt: "November 1831", richtig: "16th of December 1831"). Postwendend wurden diese Angaben korrigiert.

In einem zweiten Email (4.12.10) machte ich auf die historisch falsche Zuschreibung aufmerksam, in der Agassiz zum Begründer der Eiszeittheorie wird.

In einem dritten Email (21.12.10) kritisierte ich:

- die Geschichtsklitterung zum Thema Eiszeittheorie und die – schon von Agassiz betriebene - Unterschlagung von Karl Friedrich Schimpers substanziellem Beitrag.
- das Uebergehen des absurden Kreationismus, den der bigotte Louis Agassiz verfocht.
- den plumpen Versuch, Agassiz mit dem modernen Pattern Cladism in Verbindung zu bringen und ihm so eine Modernität anzudichten, die ihm zutiefst fremd, ja zuwider war.
- die Präsentation von Agassiz als höchst bedeutsamem Wissenschaftler, wo er doch in Wirklichkeit schon lange vor seinem Ableben als wissenschaftlich verbohrt und unbelehrbar galt.
- das lückenlose Verschweigen des extremen Rassismus, den Agassiz seit seiner Ankunft in den USA (1846) bis zu seinem Tode (1873) vertrat. Sein rassistischer Wahn trieb in schliesslich dazu, die US-Regierung zur Planung von Verbrechen gegen die Menschheit zu drängen.

Daraufhin wurde die Agassiz-Präsentation an der Universität Berkeley kritisch überarbeitet und der ursprüngliche Text über Agassiz in verschiedenen Punkten ergänzt. Der so entstandene Flicken-Text ist die heutige (ab März 2011) Präsentation des Louis Agassiz, wie sie die Universität Berkeley verbreitet. In ihr wird Agassiz's wissenschaftliche Bedeutung drastisch reduziert und gleichzeitig wird sein horrender Rassismus endlich und zum ersten Mal - vorsichtig - benannt. Dies ist ein radikaler Wandel in der Agassiz-Darstellung dieser höchst einflussreichen Universität und ein Schritt zu mehr Wahrheit und zu weniger Lüge über das Werk des Louis Agassiz.

Aber auch diese neue Version ist weit davon entfernt, den augenblicklichen Stand der Agassiz-Forschung adäquat wiederzugeben.

In einem weiteren Email und Brief (7.3.2011) an die Universität Berkeley habe ich diese Mängel benannt:

- Agassiz als einen der "Gründerväter der wissenschaftlichen Tradition des modernen Amerika" zu bezeichnen, wäre eine Beleidigung der US-amerikanischen Wissenschaft, die sich bereits zu Lebzeiten Agassiz' entschieden von seinem zutiefst unwissenschaftlichen Arbeiten abgewandt hatte.
- Agassiz als Vertreter und nicht Begründer der Eiszeittheorie zu bezeichen, ist nur dann richtig, wenn man zugleich die – von Agassiz zunächst offen zugestandene, später aber verleugnete – Rolle seines Freundes, später Feindes Karl Friedrich Schimper erwähnt.
- in einer langen Präsentation von Agassiz's Werk und Persönlichkeit nur 3% Textanteil seinem Rassismus zu widmen, ist ein Schlag ins Gesicht von Millionen von Afro-Amerikanern, denen Agassiz die Menschenwürde, ja die Daseinsberechtigung absprach.

Auf diese Kritik wollte die Universität Berkeley nicht eingehen. Immerhin war sie dann doch zu einer erneuten Korrektur ihres Textes bereit und beschloss, Agassiz' Geburtsort richtig zu schreiben (statt: "Montier", richtig: "Môtier").

Mein Email vom 24.11.2010 an :

Museum of Paleontology / University of California / 1101 Valley Life Sciences Building / Berkeley, CA 94720-4780

Hello,

I read your text on Louis Agassiz (1807-1873) where it says: "he went to Paris in November 1831 to study comparative anatomy under Cuvier ... Cuvier died in April 1832".

Agassiz arrived in Paris on 16th of december 1831, Cuvier died on 13th of May 1832.

Readers of your text on Agassiz would be happy to get the correct information.

Best regards,

Mein Email vom 04.12.2010 :

To:
Museum of Paleontology
University of California
1101 Valley Life Sciences Building
Berkeley, CA 94720-4780

4th of December 2010

Dear …,

…

Allow me to raise one more point. The article about Louis Agassiz makes the reader believe that Agassiz was the author of the ice-age-theory. The article enumerates a certain number of geological features (which were shown to Agassiz by Ignatz Venetz and Jean de Charpentier, and not - as the article says - 'observed' by Agassiz) and asserts: "Agassiz integrated all these facts to formulate his theory that a great Ice Age had once gripped the Earth".
This is simply wrong: not only contradictory to the history of Science (see the recent thesis of KRÜGER, Tobias (2008) : Die Entdeckung der Eiszeiten. Internationale Rezeption und Konsequenzen für das Verständnis der Klimageschichte. Schwabe Verlag. Basel, 2008.), but it is also contradictory to what Louis Agassiz himself declared publicly. Louis Agassiz presented the ice-age-theory (which others had presented before him) for the first time on July 24, 1837, in Neuchâtel (Switzerland) as President of the "Société Helvétique des Sciences Naturelles". He made it absolutely clear that the theory wasn't his own, but the combination of K.F. Schimper's and his own ideas ("forgetting" to mention Venetz and de Charpentier). In his own words: "Voici quelle est l'explication de tous ces phénomènes que je crois maintenant la plus plausible. Elle est le résultat de la combinaison de mes idées et de celle de M. Schimper sur ce sujet." (see page xxii of: AGASSIZ, Louis (1837) : Discours d'ouverture de la réunion de la SHSN à Neuchâtel le 24 juillet 1837, Actes de la Société helvétique des Sciences naturelles, 22ème session, Neuchâtel 1837, p. v-xxxii.).

In other words: the UCMP's article on Louis Agassiz clearly contradicts the historical facts and Louis Agassiz's own and public answer to the question of the authorship of the ice-age-theory.

You certainly agree with me that those who use the website of your worldfamous university should get the right information and would be happy to see this chapter on Louis Agassiz and the ice-age-theory updated.

Thank you for your kind attention.

Yours sincerely,
Hans Barth

Mein Email vom 21.12.2010 :

To:
Museum of Paleontology
University of California
1101 Valley Life Sciences Building
Berkeley, CA 94720-4780

20th of December 2010

SUBJECT: the Louis Agassiz article on the website of University of California, Museum of Paleontology (http://www.ucmp.berkeley.edu/history/agassiz.html)

Hello ...,

...

May I briefly summarize the central points of criticism I still have:

First: **Ice-age-theory**. As Agassiz said himself: he is not the founder of the ice-age-theory. He has produced some minor research, but is mainly a successful propagator. In my email dated 4th of December 2010, I gave the information relating to the topic. I add it here for the sake of completeness: “The article about Louis Agassiz makes the reader believe that Agassiz was the author of the ice-age-theory. The article enumerates a certain number of geological features (which were shown to Agassiz by Ignatz Venetz and Jean de Charpentier, and not - as the article says - 'observed' by Agassiz) and asserts: "Agassiz integrated all these facts to formulate his theory that a great Ice Age had once gripped the Earth". This is simply wrong: not only contradictory to the history of Science (see the recent thesis of KRÜGER, Tobias (2008) : Die Entdeckung der Eiszeiten. Internationale Rezeption und Konsequenzen für das Verständnis der Klimageschichte. Schwabe Verlag. Basel, 2008.), but it is also contradictory to what Louis Agassiz himself declared publicly. Louis Agassiz presented the ice-age-theory (which others had presented before him) for the first time on July 24, 1837, in Neuchâtel (Switzerland) as President of the "Société Helvétique des Sciences Naturelles". He made it absolutely clear that the theory wasn't his own, but the combination of K.F.

Schimper's and his own ideas ("forgetting" to mention Venetz and de Charpentier). In his own words: "Voici quelle est l'explication de tous ces phénomènes que je crois maintenant la plus plausible. Elle est le résultat de la combinaison de mes idées et de celle de M. Schimper sur ce sujet." (see page xxii of: AGASSIZ, Louis (1837) : Discours d'ouverture de la réunion de la SHSN à Neuchâtel le 24 juillet 1837, Actes de la Société helvétique des Sciences naturelles, 22ème session, Neuchâtel 1837, p. v-xxxii.).

In other words: the UCMP's article on Louis Agassiz clearly contradicts the historical facts and Louis Agassiz's own and public answer to the question of the authorship of the ice-age-theory."

Second: **Creationism**. The present article tries to minimize the staunch creationism Agassiz defended, when the article says: "Agassiz continued Cuvier's catastrophism theory -- the Earth had been periodically wracked by global catastrophes, after each of which new species of animals and plants had appeared.". No, Agassiz never said that "new species of animals and plants" simply "appeared"! Agassiz taught that – after every global extinction of all life on earth – God himself created every single species anew. That is quite different from simply : "appeared".

Third: Pattern cladism. The text tries to show that "Agassiz still made lasting contributions" to biology and says: "His construction of a classification that did not depend on any process of evolution has been followed up in the work of the "pattern cladist" school of systematists, who try to reconstruct organismal relationships without relying on assumptions of what processes generated them.".

This is real absurdity and a betrayal of Agassiz's work. If the pattern cladists "try to reconstruct organismal relationships without relying on assumptions of what processes generated them", then Agassiz is the last person to be associated with pattern cladism. Agassiz whole teaching was about what generated organisms and their relationship. His totally anti-scientific answer: God himself did it, personally and in every single case.

Fourth: **Importance**. The article exaggerates Agassiz's importance when it says: "By the time of his death, on December 14, 1873, he was publicly recognized as America's leading scientist.". During the time Agassiz lived in the USA (1846-1873), he didn't produce any major scientific contribution. By the time of his death, Agassiz was almost totally isolated as a man of incredible ideological obstinacy: polygenism, catastrophism, creationism ... Agassiz lived far behind the state-of-the-art of science in his time. The article has to admit it, but minimizes it saying: "most of his students -- including his son Alexander, a well-known naturalist in his own right -- became evolutionists". Not only most of his students, but almost all of his colleagues!

Fifth: Racism. Perhaps the most shocking flaw of the article is its absolute silence on Agassiz prominent racial theory and his racist ideas and activities. There is an abundant literature about it with world renowned authors researching the topic, like Harvard's Stephen Jay GOULD (1980; 1981) and Harvard's Louis MENAND (2001). In 2007, the Swiss Government condemned publicly the racist ideas Agassiz propagated and insisted on the fact that these ideas "went far beyond the paradigm of racist interpretations that prevailed in his days". In 1863 (Letters to S.G. Howe), Louis Agassiz urged the US-Government to organize crimes against humanity, such as: mass deportation, ethnic cleansing, ban on reproduction of "half-breeds", racial segregation (Apartheid). Since William STANTON, (1960) : The Leopard's Spots. Scientific attitudes toward race in America 1815-1859. The University of

Chicago Press. Chicago, 1960. published his research, numerous publications have shown the importance of Agassiz's racism. The UCMP's article, on the website of a world-famous university, doesn't say a single word about it: at the end of 2010! This is shocking and unbelievable.

It is obvious that Louis Agassiz - as a leading US-scientist - made a major contribution to the arsenal of ideological tools of racism and its pseudo scientific legitimization. This arsenal was used shortly afterwards by Hitler (1923, Mein Kampf) and his regime, by the criminal Apartheid system in South Africa, etc.. (See annex: my text on Louis Agassiz and Adolf Hitler).

That a world famous University continues to give false and misleading information about a great scientist like Louis Agassiz, doesn't seem to be a good idea. Wouldn't it be better to replace temporarily the Agassiz article by an announcement saying that this page is currently under construction and will be be completed by this or that date.

I offer my sincere thanks for your attention and work and wish you and your team a Happy Holiday Season and a Happy New Year 2011.

Hans Barth

Email vom 04.03.2011 an mich:

Hello Hans,

This is to inform you that we have revised the text on Agassiz. We appreciate you bringing suggested changes to our attention and my apologies for the delay.

Sincerely,

…
..., UC Museum of Paleontology
Education and Public Programs
1101 Valley Life Sciences Bldg. #4780
Berkeley, CA 94720-4780

Till March 2011, Berkeley's Museum of Paleontology presented Louis Agassiz as follows (I emphasize differences by making them bold):	**Since March 2011,** Berkeley's Museum of Paleontology presents Louis Agassiz as follows (I emphasize differences by making them bold):
Louis Agassiz (1807-1873)	**Louis Agassiz (1807-1873)**
I have devoted my whole life to the study of Nature, and yet a single sentence may express all that I have done. I have shown that there is a correspondence between the succession of Fishes in geological times and the different stages of their growth in the egg, -- that is all. It chanced to be a result that was found to apply to other groups and has led to other conclusions of a like nature. Louis Agassiz, 1869	*I have devoted my whole life to the study of Nature, and yet a single sentence may express all that I have done. I have shown that there is a correspondence between the succession of Fishes in geological times and the different stages of their growth in the egg — that is all. It chanced to be a result that was found to apply to other groups and has led to other conclusions of a like nature.* Louis Agassiz, 1869
One of the great scientists of his day, and one of the "founding fathers" of the modern American scientific tradition, Louis Agassiz remains something of a historical enigma.	One of the great scientists of his day, and one of the "founding fathers" of the modern American scientific tradition, Louis Agassiz remains something of a historical enigma.

A great systematist and paleontologist, a renowned teacher and tireless promoter of science in America, he was also a lifelong opponent of Darwin's theory of evolution. Yet even his most critical attacks on evolution have provided evolutionary biologists with insights.	A great systematist and paleontologist, a renowned teacher and tireless promoter of science in America, he was also a lifelong opponent of Darwin's theory of evolution. Yet even his most critical attacks on evolution have provided evolutionary biologists with insights.
Biography of Agassiz	**Biography of Agassiz**
The son of a minister, Jean Louis Rodolphe Agassiz was born on May 28, 1807 in the village of Montier, in the French-speaking part of Switzerland. Agassiz was educated in the universities of Switzerland and Germany as a physician, like many naturalists of the time. He studied with prominent German biologists, including Oken and Döllinger. These men were followers of *Naturphilosophie*, a German Romantic philosophy that sought for metaphysical correspondences and interconnections within the world of living things. Though Agassiz later renounced this philosophy, he was never quite able to free himself from its influence. Receiving his medical degree from the University of Erlangen in 1830, he went to Paris on December 16, 1831 to study comparative anatomy under Cuvier, the most famous naturalist in Europe. Cuvier was so impressed with Agassiz's work on fossil fish that he turned over to Agassiz his own notes and drawings for a planned work on fossil fish. Cuvier died on May 13, 1832, yet although their relationship lasted only months, Agassiz always considered himself an intellectual heir of Cuvier For the rest of his life, Agassiz promoted and defended Cuvier's geological **catastrophism** and classification of the animals. With the publication of his vast work on the fossil record of fish, *Poissons fossiles*, Agassiz's reputation began to grow in the scientific community.	The son of a minister, Jean Louis Rodolphe Agassiz was born on May 28, 1807 in the village of Montier, in the French-speaking part of Switzerland. Agassiz was educated in the universities of Switzerland and Germany as a physician, like many naturalists of the time. He studied with prominent German biologists, including Oken and Döllinger. These men were followers of Naturphilosophie, a German Romantic philosophy that sought metaphysical correspondences and interconnections within the world of living things. Though Agassiz later renounced this philosophy, he was never quite able to free himself from its influence. Receiving his medical degree from the University of Erlangen in 1830, he went to Paris on December 16, 1831 to study comparative anatomy under Cuvier, the most famous naturalist in Europe. Cuvier was so impressed with Agassiz's work on fossil fishes that he turned over to Agassiz his own notes and drawings for a planned work on fossil fishes. Cuvier died on May 13, 1832, yet although their relationship lasted only months, Agassiz always considered himself an intellectual heir of Cuvier For the rest of his life, Agassiz promoted and defended Cuvier's geological views and his classification of the animals. With the publication of his vast work on the fossil record of fishes, Poissons fossiles, Agassiz's reputation began to grow in the scientific community.
After Cuvier's death, Agassiz took up a professorship at the Lyceum of Neuchatel in Switzerland, where for thirteen years he worked on many projects in paleontology, systematics, and glaciology. Agassiz took up the study of glaciers in 1836 **as something of a sideline, but his contributions made him known as the "Father of Glaciology." Observing the glaciers of his native Switzerland**, Agassiz noticed the marks that glaciers left on the Earth: great valleys; large	After Cuvier's death, Agassiz took up a professorship at the Lyceum of Neuchatel in Switzerland, where for thirteen years he worked on many projects in paleontology, systematics, and glaciology. Agassiz took up the study of glaciers in 1836 **and was guided by colleagues Ignatz Venetz and Jean de Charpentier to examine the geological features of his native Switzerland**. Agassiz noticed the marks that glaciers left on the Earth: great valleys; large glacial erratic boulders

glacial erratic boulders carried long distances; scratches and smoothing of rocks; mounds of debris called moraines pushed up by glacial advances. He realized that in many places these signs of glaciation could be seen where no glaciers existed. Previous scientists had variously explained these features as made by icebergs or floods; **Agassiz integrated all these facts to formulate his theory** that a great Ice Age had once gripped the Earth, and published his **theory** in *Étude sur les glaciers* in 1840. His later book, *Système glaciare* (1847), presented further evidence for his theory, gathered all over Europe: Agassiz later found even more evidence of glaciation in North America.	carried long distances; scratches and smoothing of rocks; mounds of debris called moraines pushed up by glacial advances. He realized that in many places these signs of glaciation could be seen where no glaciers existed. Previous scientists had variously explained these features as made by icebergs or floods, **but following the lead of others, Agassiz became a powerful proponent** of the theory that a great Ice Age had once gripped the Earth, and published his **ideas** in *Étude sur les glaciers* in 1840. His later book, *Système glaciare* (1847), presented further evidence for this theory, gathered all over Europe. Agassiz later found even more evidence of glaciation in North America.
In 1846, Agassiz came to the United States;	In 1846, Agassiz came to the United States **on a lecture tour; he was a huge popular success and his expertise was widely recognized and celebrated**.
in 1848 he accepted a professorship at Harvard. He immediately set about organizing and acquiring funding for a great museum of natural history. In 1859 his dream came true with the founding of the Museum of Comparative Zoology, which opened its doors in 1860.	In 1848 he accepted a professorship at Harvard. He immediately set about organizing and acquiring funding for a great museum of natural history. In 1859 his dream came true with the founding of the Museum of Comparative Zoology, which opened its doors in 1860. **This was the first publicly funded science building in North America.**
Agassiz labored for support of science in his adopted homeland; he and his colleagues urged the creation of a National Academy of Sciences, and Agassiz became a founding member in 1863. Agassiz was also appointed a regent of the Smithsonian Institution in 1863. He campaigned constantly for funds and resources for American science, and for his research projects in particular -- and the funding grew and grew (although it never seemed *quite* enough for all that Agassiz wanted to do -- and although Agassiz himself never quite finished most of his grand projects).	Agassiz labored for support of science in his adopted homeland; he and his colleagues urged the creation of a National Academy of Sciences, and Agassiz became a founding member in 1863. Agassiz was also appointed a regent of the Smithsonian Institution in 1863. He campaigned constantly for funds and resources for American science, and for his research projects in particular — and the funding grew and grew (although it never seemed *quite* enough for all that Agassiz wanted to do — and although Agassiz himself never quite finished most of his grand projects).
Agassiz's Scientific Thought	**Agassiz's scientific thought**
Agassiz stayed loyal to Cuvier's classification, which divided the animal kingdom into four branches: Vertebrata, Insecta, Vermes (worms) and Radiata (radially symmetrical animals). Within each *embranchement* the classes could be ranked from lowest to highest; the orders in each class could be similarly ranked, and so on down to the species level, with *Homo sapiens* sitting at the very top of the scale of life. The cornerstone of	Agassiz stayed loyal to Cuvier's classification, which divided the animal kingdom into four *embranchements* (branches): Vertebrata, Insecta, Vermes (worms) and Radiata (radially symmetrical animals). Within each *embranchement* the classes could be ranked from lowest to highest; the orders in each class could be similarly ranked, and so on down to the species level, with *Homo sapiens* sitting at the very top of the scale of life. The

Agassiz's biological thought was his belief that the gradation from low to high forms, in any taxon, paralleled the order of appearance in the fossil record, the order of stages in the organisms' development, and the distribution and ecology of the taxon. The "lowest" forms were found lowest in the rock record, earliest in embryonic development, and at the highest latitudes. Agassiz summed up his thought in his *Essay on Classification*, first published in 1851:	cornerstone of Agassiz's biological thought was his belief that the gradation from low to high forms, in any taxon, paralleled the order of appearance in the fossil record, the order of stages in the organisms' development, and the distribution and ecology of the taxon. The "lowest" forms were first found lowest in the rock record, their morphological features appeared earliest in embryonic development, and they are distributed today at the highest latitudes. Agassiz summed up his thought in his *Essay on Classification*, first published in 1851:
. . . the phenomena of animal life correspond to one another, whether we compare their rank as determined by structural complication with the phases of their growth, or with their succession in past geological ages; whether we compare this succession with their relative growth, or all these different relations with each other and with the geographical distribution of animals upon the earth. The same series everywhere!	*… the phenomena of animal life correspond to one another, whether we compare their rank as determined by structural complication with the phases of their growth, or with their succession in past geological ages; whether we compare this succession with their relative growth, or all these different relations with each other and with the geographical distribution of animals upon the earth. The same series everywhere!*
Darwin, and many others after him, accepted these parallelisms as providing evidence for evolution. Darwin wrote in *The Origin of Species* that "this doctrine of Agassiz accords well with the theory of natural selection,"	Darwin, and many others after him, accepted these parallelisms as providing evidence for evolution. Darwin wrote in *The Origin of Species* that "this doctrine of Agassiz accords well with the theory of natural selection," **although he was writing somewhat ironically because he did not agree with Agassiz's belief of a strict "parallelism."**
and Haeckel in particular invoked the "recapitulation of phylogeny by ontogeny" in support of evolution. But Agassiz was no evolutionist; in fact, he was probably the last reputable scientist to reject evolution outright for any length of time after the publication of *The Origin of Species*. Agassiz saw the Divine Plan of God everywhere in nature, and could not reconcile himself to a theory that did not invoke design. He defined a species as "a thought of God." As he wrote in his *Essay on Classification*:	Haeckel in particular invoked the "recapitulation of phylogeny by ontogeny" in support of evolution. But Agassiz was no evolutionist; in fact, he was probably the last reputable scientist to reject evolution outright for any length of time after the publication of *The Origin of Species*. Agassiz saw the Divine Plan of God everywhere in nature, and could not reconcile himself to a theory that did not invoke design. He defined a species as "a thought of God." As he wrote in his *Essay on Classification*:
The combination in time and space of all these thoughtful conceptions exhibits not only thought, it shows also premeditation, power, wisdom, greatness, prescience, omniscience, providence. In one word, all these facts in their natural connection proclaim aloud the One God, whom man may know, adore, and love; and Natural History must in good time become the analysis of the thoughts of the Creator of the Universe. . .	*The combination in time and space of all these thoughtful conceptions exhibits not only thought, it shows also premeditation, power, wisdom, greatness, prescience, omniscience, providence. In one word, all these facts in their natural connection proclaim aloud the One God, whom man may know, adore, and love; and Natural History must in good time become the analysis of the thoughts of the Creator of the Universe ….*

Agassiz continued Cuvier's catastrophism theory -- the Earth had been periodically wracked by global catastrophes, after each of which new species of animals and plants had appeared. Followers of Cuvier had suggested that the Biblical Flood was the last catastrophe. Agassiz replaced the Flood with his glaciers, which he thought had been formed instantaneously all over the world; he called glaciers "God's great plough," and tried unsucessfully to find evidence of glaciation in Brazil.	**Agassiz was a staunch creationist; he taught that after every global extinction of life God created every species anew. This differed from the view of Cuvier, who recognized extensive and sometimes apparently quite abrupt changes in fossil faunas and their environments. Cuvier did not think that God re-created life; he thought that new species migrated in from elsewhere as climates and environments changed.**
Agassiz's works on living and fossil fish and on glaciers have remained classics. His work on glaciers revolutionized geology, and drove another nail in the coffin of the Biblical Flood as a serious scientific hypothesis. He trained and influenced a generation of American zoologists and paleontologists, including Alpheus Hyatt, William Healey Dall, David Starr Jordan, Nathaniel Shaler, and Edward S. Morse. He left a mark on the development and the practice of American science, and brought science to "the man in the street" as no one else had before. People from all over the world read his books, sent him specimens, and asked his advice. By the time of his death, on December 14, 1873, **he was publicly recognized as America's leading scientist**.	Agassiz's works on living and fossil fishes and on glaciers have remained classics. His work on glaciers revolutionized geology, and drove another nail in the coffin of the Biblical Flood as a serious scientific hypothesis. He trained and influenced a generation of American zoologists and paleontologists, including Alpheus Hyatt, William Healey Dall, David Starr Jordan, Nathaniel Shaler, and Edward S. Morse. He left a mark on the development and the practice of American science, and brought science to "the man in the street" as no one else had before. People from all over the world read his books, sent him specimens, and asked his advice. By the time of his death, on December 14, 1873, **he was the most famous scientist in America, and although he actually published few major scientific works after he emigrated, his popular books and public lectures made him extremely well-known and respected by the public. Scientifically, however, he was being left behind by his absolute rejection of evolution and his insistence on glaciers as a major force that shaped geology worldwide.** **Agassiz was also being left behind by his racist attitudes, which were extreme even for his day. In the early and mid-1800s there was considerable scientific debate about the origins of humans and of human races, and about just how different human groups were. This debate concerned all groups of plants and animals — how do you tell how much difference constitutes a species? — and was an important avenue of inquiry. Unlike Darwin and others, who thought that humans all belonged to one species and that**

	their populations had differentiated through time as they spread geographically and adapted to new environments, Agassiz could not accept that all groups of humans belonged to the same species, and he argued vehemently for the inferiority of non-white human groups. He was not alone in this; several prominent scientists saw populational differences as major and discontinuous, and used various statistical and other arguments to support this. But Agassiz was also physically revulsed by the idea that all humans were equal. In this feeling he was not alone, but increasingly he was seen as the product of a bygone age himself.
His philosophy of nature, aiming to understand the Divine Plan, is the last great expression of the old school of natural theology, started by men like John Ray almost two hundred years before. Natural theology had once inspired countless scientists, including Darwin and his forerunners, but by the time of publication of the *Origin of Species* it had largely run out of steam, unable to offer any real explanation for natural phenomena except "God made it that way." Within Agassiz's lifetime, and much to his grief, most of his students -- including his son Alexander, a well-known naturalist in his own right -- became evolutionists, though not necessarily Darwinians.	His philosophy of nature, aiming to understand the Divine Plan, is the last great expression of the old school of natural theology, started by men like John Ray almost two hundred years before. Natural theology had once inspired countless scientists, including Darwin and his forerunners, but by the time of publication of *The Origin of Species* it had largely run out of steam, unable to offer any real explanation for natural phenomena except "God made it that way." Within Agassiz's lifetime, and much to his grief, most of his students — including his son Alexander, a well-known naturalist in his own right — became evolutionists, though not necessarily Darwinians.
Yet Agassiz still made lasting contributions to evolutionary biology and systematics. His construction of a classification that did not depend on any process of evolution has been followed up in the work of the "pattern cladist" school of systematists,who try to reconstruct organismal relationships without relying on assumptions of what processes generated them. His finding of parallels between ontogeny, paleontology, and morphology was rapidly adopted by biologists like Haeckel and used to support evolution. Today, these parallels are known not to be exact correspondences, but the links between development and evolution remain an area of active research. Perhaps Agassiz's greatest lasting insight was the realization that paleontology, embryology, ecology, and biogeography had to contribute to any classification that purported to show the	**Agassiz's idea of the "three-fold parallelism" — that the order of appearance of animals in the fossil record largely mirrors the order of appearance of their morphological features during the development of animals, and that this in turn mirrors the arrangement of their phylogenetic relationships — was not strictly accepted even in his day, although many facts are consistent with it. Like many biological generalizations, there are too many exceptions to its principles to use it as a strict guide. And we must remember that Agassiz did not accept evolution, so the explanation of why these patterns would make sense to modern biology would have been anathema to him. Still, the general concordance of patterns that he noticed and described stimulated much research in his day. It would not be correct to say that today's "comparative biology" and "evolutionary**

true relationships of organisms -- even if those relationships, to Agassiz, existed only in the mind of God. As he wrote in his *Essay on Classification*: **Classification seems to me to rest upon too narrow a foundation when it is chiefly based on structure. Animals are linked together as closely by their mode of development, by their relative standing in their respective classes, by the order in which they have made their appearance upon earth, by their geographical distribution, and generally by their connection with the world in which they live, as by their anatomy. All these relations should, therefore, be fully expressed in a natural classification; and though structure furnishes the most direct indication of some of these relations, always appreciable under every circumstance, other considerations should not be neglected which may complete our insight into the general plan of creation.**	**developmental biology" (or "evo-devo") owe a great debt to Agassiz, but at least he saw the grand scheme of many of its patterns, despite his refusal to accept evolution.**
The Museum of Comparative Zoology at Harvard University, founded by Agassiz, is still a leading natural history museum. **Another leading natural history museum, the Academy of Natural Sciences in Philadelphia, have provided this biographical sketch of Agassiz as part of their set of biographies of biological collectors and explorers in the Neotropics.** The 1869 French translation of Agassiz's *Essay on classification* includes a chapter, not found in earlier editions, that clearly explains Agassiz's reasons for resisting Darwinism. This chapter is available on the Web thanks to its translator, Paul J. Morris.	The Museum of Comparative Zoology at Harvard University, founded by Agassiz, is still a leading natural history museum. The 1869 French translation of Agassiz's *Essay on classification* includes a chapter, not found in earlier editions, that clearly explains Agassiz's reasons for resisting Darwinism. This chapter is available on the Web thanks to its translator, Paul J. Morris.

Hans Barth - Gd' Rue 16 – CH-1700 Fribourg

hansbarth@bluewin.ch

Mr. Robert J. Birgeneau
Office of the Chancellor
200 California Hall # 1500
University of California
Berkeley, CA 94720-1500

Fribourg, 7th of March 2011

Sir,

A special page of Berkeley's Museum of Paleontology (UCMP) provides information about Harvard's Louis Agassiz (1807-1873), his work and his influence. On 24th of November 2010 and again on 21st of December 2010[1], I gave notice to [redacted], of wrong information on the Agassiz page.

The UCMP responded positively to my request for correction of errors and offers, since the beginning of March 2011, a revised version of the previous text.[2]

The new version is much better than the old one, but still clearly unsatisfactory at least in three points: Agassiz's refusal of "*modern American scientific tradition*", Agassiz's (limited) contribution to the Ice-Age-theory and his (important) contribution to pseudo-scientific racism.[3]

Agassiz's incompatibility with "*modern American scientific tradition*".
The new version of UCMP's presentation of Louis Agassiz suffers from a serious constructional defect: it maintains the greater part of the old version and adds few new elements. Old and new text elements are often in clear contradiction to each other. Hailing Louis Agassiz as "*one of the "founding fathers" of the modern American scientific tradition*" (old and new version) is contradicted by: "*Scientifically, however, he was being left behind by his absolute rejection of evolution and his insistence on glaciers as a major force that shaped geology worldwide*.". The UCMP forgets to add Agassiz's "scientific" racism and his polygenism and his catastrophism and similar humbug: none of this is part "*of the modern American scientific tradition*". In fact: Agassiz refused the very beginning of the new paradigm. The renowned 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**." [4] (my emphasis/my translation).

The Agassiz-Schimper version of the Ice-Age-theory.
The new UCMP text says: "*following the lead of others, Agassiz became a powerful proponent of the theory that a great Ice Age had once gripped the Earth*". When Agassiz formulated his ideas on "Ice Age" (24th of July 1837 at Neuchâtel, Switzerland), he not only used a term that had been coined by his friend Karl Friedrich SCHIMPER, but Agassiz declared in front of the European scientific

[1] See both my emails in the annex.
[2] See both texts attached.
[3] I don't go into details of secondary interest, like the wrong spelling of Agassiz's birthplace in both the old and the new version. Agassiz was born in Môtier, not Montier.
[4] 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) (http://www.annales.org/archives/cofrhigeo/agassiz-fixisme.html)

Hans Barth - Gd' Rue 16 – CH-1700 Fribourg

hansbarth@bluewin.ch

community : my explanation is "*the result of a combination of my ideas and Mr. Schimper's ideas on the subject*"[5]. In other words: Agassiz clearly confirmed the co-authorship of K.F. Schimper.
By failing to mention the co-author of Agassiz's statement, the UCMP's text doesn't respect the rules concerning the authorship of scientific statements.

Agassiz's extreme racism.
STANTON, LURIE, GOULD, MENAND, ROGERS,[6] and many others have explored the racial ideology and the corresponding racist activities of Louis Agassiz. Racial ideology is an important part of Agassiz's work and an important contribution to what we all know to be a crime against humanity.
The new UCMP text on Agassiz dedicates less than 3% of its words directly to Agassiz's racism, which appears – thus - as negligible. Only 3 sentences describe Agassiz's racism, followed by relativisations such as "*he was not alone in this*". This is unacceptable and in complete contradiction with the present state of research.

Which are these 3 sentences:

> "*Agassiz was also being left behind by his racist attitudes, which were extreme even for his day*. […] *Agassiz could not accept that all groups of humans belonged to the same species, and he argued vehemently for the inferiority of non-white human groups*. […] *But Agassiz was also physically revulsed by the idea that all humans were equal*.".

Which are Agassiz's "*racist attitudes*" and in what are they "*extreme even for his day*"? Agassiz's belief that "*negroes*" and "*half-breeds*" had a different origin and were inferior to Whites and his being "*physically revulsed*" by "*Negroes*" (not by an "*idea*"!) was in no way "*extreme even for his day*". The UCMP simply remains silent about the "*racist attitudes*" of Louis Agassiz. This silence is shocking and incompatible with Berkeley's pretentions to scientific and moral excellence.

The UCMP keeps the visitors of its website in the dark about the real "*racist attitudes*" of Louis Agassiz.

Louis Agassiz expressed in a series of letters to a commission of the U.S. government the political implications of his theory of "*races*", which claims:

- "*Races*" are biologically separate creations of God and are unequal species of the genus "*mankind*".
- "*Negroes*", by nature and forever, are inferior to "whites" and have far less cultural abilities.
- "*Mulattoes*" ("*half breeds*") have inherited only the negative characteristics of blacks and whites. They are biologically (almost) sterile and unable to survive.
- "*Races*" belong biologically to their respective "*zoological province*", i.e. the place where God Himself created them.

[5] "Voici quelle est l'explication de tous ces phénomènes que je crois maintenant la plus plausible. Elle est le résultat de la combinaison de mes idées et de celle de M. Schimper sur ce sujet." (see page xxii of: AGASSIZ, Louis (1837) : Discours d'ouverture de la réunion de la SHSN à Neuchâtel le 24 juillet 1837, Actes de la Société helvétique des Sciences naturelles, 22ème session, Neuchâtel 1837, p. v-xxxii.).
[6] STANTON, William (1960) : The Leopard's Spots. Scientific attitudes toward race in America 1815-1859. The University of Chicago Press. Chicago, 1960. LURIE, Edward (1960) : Louis Agassiz. A Life in Science. The University of Chicago Press. Chicago, 1960. GOULD, Stephen Jay (1980) : The Panda's Thumb. More Reflections in Natural History. W.W. Norton & Com. New York, 1980. GOULD, Stephen Jay (1981) : The Mismeasure of Man. W.W. Norton & Com. New York, 1981. MENAND, Louis (2001) : The Metaphysical Club. Farrar, Straus and Giroux. New York, 2001. ROGERS, Molly (2010) : Delia's Tears. Race, Science, and Photography in Nineteenth-Century America. Yale University Press. New Haven & London, 2010.

Hans Barth - Gd' Rue 16 – CH-1700 Fribourg

hansbarth@bluewin.ch

From this fake theory Agassiz derived politico-social proposals for the period after the abolition of slavery. Every single of his suggestions amounts to ethnic cleansing:

- **Violent expulsion**. To remove all African-Americans from the USA, the "*blacks*" - so the simplest solution – should be sent back to Africa: by use of inevitable violence.
- **Fostered decay**. As an alternative to violent expulsion, Agassiz proposed to get rid of the "*negro race*" by "*aiding its decay*".

For the - likely - event that the U.S. should not adopt one of these "solutions", Agassiz provided two alternatives:

- **Segregation**. The "*negroes*" should settle in certain areas of the Southern States and there - separate from the "*whites*" - live with restricted rights.
- **Ban on reproduction**. The "*half breeds*" should - "*by all means*" - be prevented from reproducing.

Each of these proposals represents in itself what we call a "crime against humanity". And no one can be astonished to find the "*racist attitudes*" of "*one of the "founding fathers" of the modern American scientific tradition*" (UCMP) reprinted in Adolf Hitler's Mein Kampf.[7]

Dear Mr. Birgeneau, you write: "*Berkeley's role as a model public university is so important that we must summon ourselves to its highest aspirations. Any failure to lead as a pre-eminent research and teaching university not only diminishes Berkeley but also diminishes the standards to which public education in this nation aspires.*" (UC Berkeley's website). The UCMP's presentation of Louis Agassiz clearly "*diminishes Berkeley but also diminishes the standards to which public education in this nation aspires*".

Yours faithfully

Hans Barth

Copy: [redacted]

Annex: [redacted]

Attached: The old and the new text on Agassiz, published by UCMP.
My text: Louis Agassiz and Adolf Hitler. Documents in racist mania. In: Sasha Huber (ed.) : Rentyhorn ~~Agassizhorn~~. Kiasma. Helsinki, 2010. p. 22-32.

[7] See attachment. My text on : Louis Agassiz and Adolf Hitler. Documents in racist mania. In: Sasha Huber (ed.) : Rentyhorn ~~Agassizhorn~~. Kiasma. Helsinki, 2010. p. 22-32

Email vom 06.04.2011 an mich:

Dear Hans,

We appreciate the additional information that you have supplied to us. As a result, the adjustments we have made to the website provide a more accurate portrayal of Louis Agassiz, and we feel are appropriate given the focus of our extensive web site. There are more detailed biographies of Agassiz available should our readers wish additional information.

...

Email vom 19.04.2011 an Berkeley:

Dear ...,

Let me thank you for your work and friendliness.

At the same time, it is unfortunate and disappointing in my view, that a leading university seems to be unwilling to offer correct information about Louis Agassiz. It seems to be impossible in the USA to recognize the US crimes against humanity and to name the masterminds behind the scenes.

Do you see - at least - a possibility to adopt the correct spelling of Agassiz's birthplace: it's Môtier, not Montier.

Best regards,
Hans Barth

Email vom 19.04.2011 an mich:

The spelling has been corrected, Hans. Thank you!