

ART TALK MARIT ARNEKLEIV
HABITATS LIGHT
OPPLAND KUNSTNERSENTER – OPPLAND ART
CENTER – LILLHAMMER
ENGE NORTH TRETEN
HANS-JØRGEN WALLIN WEIHE
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Cover: The Enge farm March 2015

Introduction

It is a great honor to be able to give an art-talk introducing an exhibition of the artist Marit Arnekleiv, and particular pleasure give a talk connected to my own research and writings.¹ Science might seem far away from art, but the two are indeed closely related. Curiosity and exploration is the basis of both as well as dedication and skilled technique.

Phrasing myself like that I am acutely aware of my own limitations and very much aware of the sophisticated creativity and skills of the artist Marit Arnekleiv. This publication has been substantially changed after the presentation in order to include references and additional information.

Marit Arnekleiv

The artist Marit Arnekleiv is one of the dedicated Norwegian artists working within the tradition of land-art as well as in the forefront of using modern technology and digital techniques. In an earlier exhibition in 2014 Marit Arnekleiv² made connection to the Lillehammer painter Thorvald Erichsens (1868 – 1939). At the exhibition Arnekleiv used one of the paintings by Erichsen.³ The title of the work «Reset View» pointed to the exhibition by displaying a characetic roof structure from Erichsens painting on the central market place of the town close to the place the structure still exist.⁴

In this exhibition Marit Arnekleiv use her own local community from Tretten, historical photos, botanical observations and collections by a local farmer, Einar Enge (1887 – 1964), that can be found in the Botanical collections of the University of Bergen and the work by the famous naturalist and evolutionist Alfred Russel Wallace (1832 – 1913). His work on palm trees in the Amazonas is part of her material and through photographic re-working of his illustrations Marit Arnekleiv makes us relate to his work as well as the local amateur naturalist. Two large canvases are displayed at the barn wall of Einar Enge's farm (front page). The farm is situated high up in the hillside above Tretten. It is a place with a view of the valley close to where the spruce forest starts eventually reaching up to the treeless mountain plateaus.

The world and Tretten

Tretten is a small community north of Lillehammer. Back around the First World War it was an important centre for communication with a railroad station, a marketplace and roads leading north, south and westwards. Those not working as farmers or in forestry had gardens supplementing their income as workers on the local dairy, the railroad, lumberyard or in the many stone quarries.

¹ Weihe (2014; 2010; 2009; 2009 b; 2006).

² See for example; Arnekleiv; Østavik og Boym (2011); Kurdøl, Egge og Arnekleiv (2010); Galleri Storck (2014 b); Ringsaker kommune (2010); Christiansen og Arnekleiv (1995); Arnekleiv, Egge og Kurdøl (1990); arnekleiv.no.

³ Thorvald Erichsen has painted a number of paintings using the motif. Three examples; «Utsikt fra Breiseth» (View from Breiseth hotel); «Svibel i vinduet» (Hyacinth in the window) and «Utsikt over «Balbergkampen» (View towards Balbergkampen) from 1918.

⁴ Weihe (2014).

The importance of gardens supplementing the income of workers remained important well into the 1970s and even up to our time the traditions of gardening and collecting berries, fishing remained important. Another part of Marit Arnekleiv's exhibition is about the local communities, the local gardens and the houses of those living in the community. Through high-tech reproductions of a selected number of the houses Marit give us examples of local dwellings.

Even if identifying with their local community the people of Tretten had a considerable interest and curiosity of the world in far-away places. They related to modern science as well as to local traditions. They were close to the heated discussions of science as well as political conflicts of faraway places and the theological dogmas. They were proud Norwegians building the new-born nation of Norway as increasingly part of the international community.

Those coming to Arnekleiv's exhibition are faced both with her artistic expression and the important questions of the importance of the world for a local community as well as the question of the importance of the local for the big world.

It is the obvious fact that both Charles Darwin (1809 – 1882) and Alfred Russel Wallace made their evolutionary theories from data collected in local communities.⁵ Science builds on data collected by many, such as interested local naturalists such as the farmer at Tretten. Both Darwin and Wallace readily acknowledged their local helpers. Marit Arnekleiv points to the connection between the naturalists of her own community and the world acknowledged naturalists of the great world.

The farmer Einar Enge

Einar Enge (1887 – 1964) was born and lived in Tretten his whole life. He was educated at Stor Hove Landbruksskole (Stor Hove School of Farming) from 1913 – 1914 in Fåberg just north of Lillehammer. The school was one of the foremost schools of agriculture in Norway.

His observation of skogranke (*Clematis sibirica*)⁶ was registered in the collection of the University of Bergen a few years after 1914, the year he graduated from the Agricultural School of Stor Hove. Most likely the plant had been collected as part of his studies. The students were required to make a collection of plants. The *Clematis sibirica* is extremely rare in Norway, but a number of the plants can be found in river ravines along the Gudbrandsdal valley.

⁵ Browne (2002); Costa (2014 og 2013)

⁶ There are a number of registered synonyms for the plant;

Clematis alpine subsp. *Sibirica* (Commonly used in 2015).

Atragene alpine subsp. *Sibirica*

Atragene alpina var. *sibirica*

Atragene sibirica

Atragene speciosa

Atragene speciosa subsp. *Saxatilis*

Atragene tianscanica

Clematis var. *alba*

Clematis alpine var. *altaica*

Clematis alpine var. *sibirica*

Clematis sibirica

Hortipedia (17.03.2015).

Enge inherited the farm, most likely in 1918, and from that time he was the farmer of the Enge farm. The Norwegian tradition was that the oldest son worked on the farm until his father gave him the responsibility of running the farm. The older farmer and his wife usually continued to live and work on the farm, but left the main building to the young farmer and his family.⁷

Enge was known to be a well-studied farmer with great interest in botany as well as society. His farm was one of the bigger situated high up in the valley side with sloping fields beneath the farm, some farmland higher up and then forested areas until the mountain plains. As all farms in the area, the farm moved the animals to grazing up in the mountains during the summer to what was called a seter (sæter) or mountain farm.



The family Enge about 1913. Einar Enge to the far left.

Bjørnstjerne Bjørnson, Herbert Spencer and Christopher Bruun

Travelling west from Tretten connects to the Gausdal valley and traveling downriver the valley to Aulestad the home of the Noble Laureate in literature Bjørnstjerne Bjørnson (1832 – 1910).⁸ Bjørnson wrote literary works using the local farming culture as background. He settled in the local community due to the just started local folk highschool called Vonheim started by the priest Christopher Bruun.

Bruun connected to the Grundtvig movement involved in starting colleges for the people or what was called folkehøgskuler (Folk High Schools). He was a firebrand priest participating

⁷ Arnekleiv (2015, 16th of March).

⁸ Kolloen (2003 and 2004).

as a soldier in the war in Schleswig Holstein in 1864 rallied to the defence of Denmark against the attacking Preussian forces.⁹ Even if an important figure for the Nordic movement and for education for the common man he was a conservative theologian reacting to many of the modern ideas such as those of Herbert Spencer and the free-thinkers.

Bjørnson became both a free-thinker and a great admirer of Charles Darwin and the social Darwinist Herbert Spencer.¹⁰ His free-thinking caused controversies with Christopher Bruun. Bruun was very much a creationist arguing for the reality of hell and he was highly critical to blasphemous ideas of natural selection. The heated discussions from Gausdal were far-reaching. Bjørnstjerne Bjørnson wrote political articles in many of the important international newspapers.¹¹ He was profiled as a free-thinker and as critical of religious dogmatism.¹² Bruun was not a man of the main-stream. Later on, in 1905, he was against dissolving the union with Sweden.¹³ His stand was very unpopular he was virtually alone fighting for the maintenance of the union.¹⁴

In small communities, like Tretten, the discussions were well-known and so were the writings of Darwin and Spencer. They were both translated to Norwegian (Danish) and published as cheap pamphlets distributed all over the country to interested readers. Local libraries were established as well giving easy access to information to the local population.

The naturalist Carl Lumholtz

The naturalist and anthropologist Carl Lumholtz (1851 -1922) was born in Lillehammer and made exhibitions to Australia, Borneo, India and Sierra Madre in Mexico. His books were published in several languages. However, his main language of science was English.¹⁵ In his local region he was a well-known explorer. Still, the main heroes of his time was the Norwegian Polar explorers like Fridthjof Nansen (1861 – 1930) and Roald Amundsen (1872 - 1928). Polar expeditions gave pride to the new-born independent Norway, while expeditions into tropical areas were difficult to relate to the Norwegian national cause and expansion. Still, the tropical expeditions caused considerable interest and for those interested in botany, nature and anthropology they were important and a cause of great pride.

⁹ Bruun and Sletten (1964).

¹⁰ Rumney (2007; Spencer (1895; 1886; 1885; 1884; 1883; 1879; 1878; 1870; 1864-1867).

¹¹ Bjørnson (1898); VG 1898).

¹² Amdam (1993; 1979 and 1977); Hoem (2013, 2010 a and b); Keel (1999) and Weihe (2010);

¹³ Bruun (1905).

¹⁴ Weihe (2009).

¹⁵ Lumholtz (1921; 1920; 1902 & 1889).



Carl Lumholtz – portrait of the explorer in the book “Among Cannibals” from 1889¹⁶

¹⁶ Lumholtz (1889).

P.Z.S. 1864. Pl. XXXII.



J. Smith del.

Hannhart imp.

DENDROLAGUS LUMHOLTZI.

Lumholtz Tree-Kangaroo (Dendrolagus Lumoltzi)¹⁷

Alfred Russel Wallace

Alfred Russel Wallace (8 January 1823 – 7 November 1913) was a scholar of many fields. He was an anthropologist, botanist, biologist, geographer, surveyor and a penetrating theorist independently conceiving a theory of natural selection published with some of Charles Darwin's (1809 – 1882) writings in 1858. Darwin was working on his theory 1858 when Wallace sent him a paper describing the same ideas, resulting in the joint publication of both of their theories. The 24th of November 1859 Charles Darwin published *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*.¹⁸ The first 1250 copies was sold the same day as the book was on the market.

Darwin thought of Wallace as a leading thinker on evolution and the two theorists had an extensive correspondence. Darwin and Wallace stimulated each other's ideas and theories and often quoted the works of the other. Wallace evolutionary views diverged from Darwin and he developed his own evolutionary theory.¹⁹ However, Darwin thought of Wallace's theory as in the essence the same as his own. Darwin focused upon competition between individuals of the same species, whereas Wallace focused on the environmental pressures forcing species and varieties to adapt to local conditions. In that way the species were, in his opinion, forced to diverge according to local conditions. Even if focusing on group selection, Wallace was also discussing individual variations.²⁰ In his 1858 paper he wrote: "*The action of this principle is exactly like that of the centrifugal governor of the steam engine, which checks and corrects any irregularities almost before they become evident; and in like manner no unbalanced deficiency in the animal kingdom can ever reach any conspicuous magnitude, because it would make itself felt at the very first step, by rendering existence difficult and extinction almost sure soon to follow.*"

From the 1970's the connection between natural selection and systems theory has been further explored by a number of scholars among them Gregory Bateson (1904 – 1980).²¹ Thus, Wallace was acknowledged as a pioneer in the field of one of the most used theories both of social and natural sciences.

An even earlier theorist the Dutch scientist Petrus Camper (May 11, 1722 – April 7, 1789), was working on similar theories as a naturalist, anthropologist, artist, physician, anatomist, paleontologist. His drawings of facial angles of both animals and humans are illustrations for the theory of natural selection.²²

Discussions on evolution were active all over Europe and Norway was no exception. A number of works were translated and the ideas were discussed in a wide audience.²³

¹⁸ Darwin (1859).

¹⁹ Browne (2002); Costa (2013 and 2009); Darwin C. (2006; 1998 a and b; 1889-1890;; 1875; 1872; 1871, 1860; 1859); Darwin, F. (1887.1888 and 1887); Dennet (1995); Freeman (1977).

²⁰ Fichman (2004).

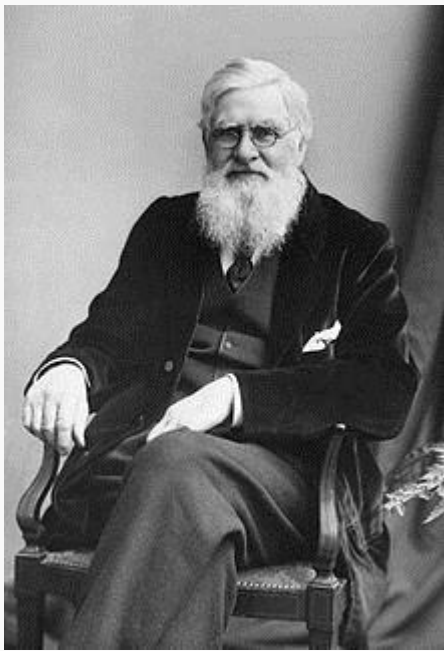
²¹ Bateson (1979).

²² Meijer (2015).

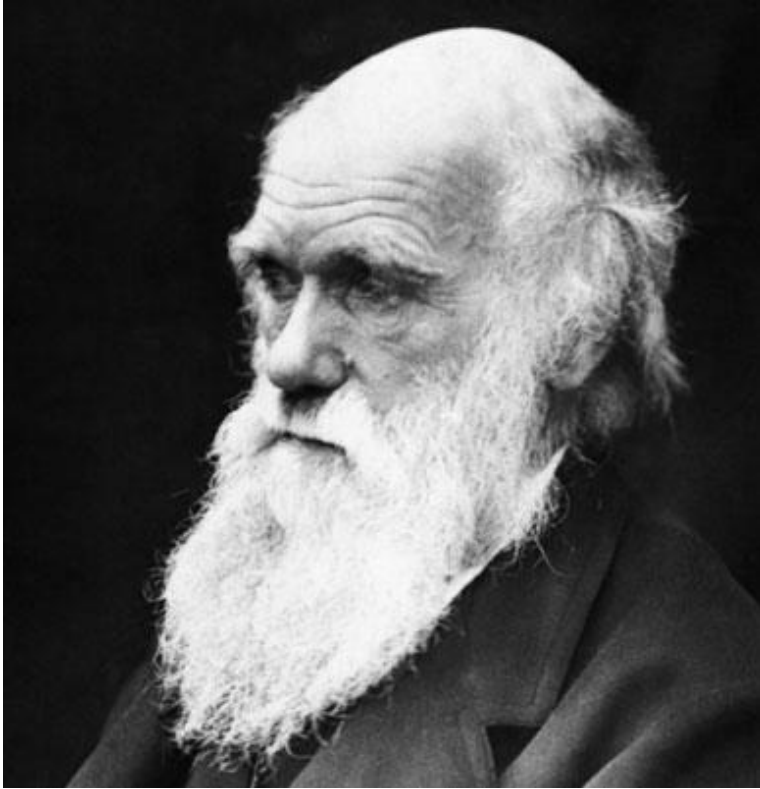
²³ Darwin (1889-1890; 1875; 1860); Dennet (1995); Johan-Olsen (1887)



Petrus Camper (1722 – 1789).



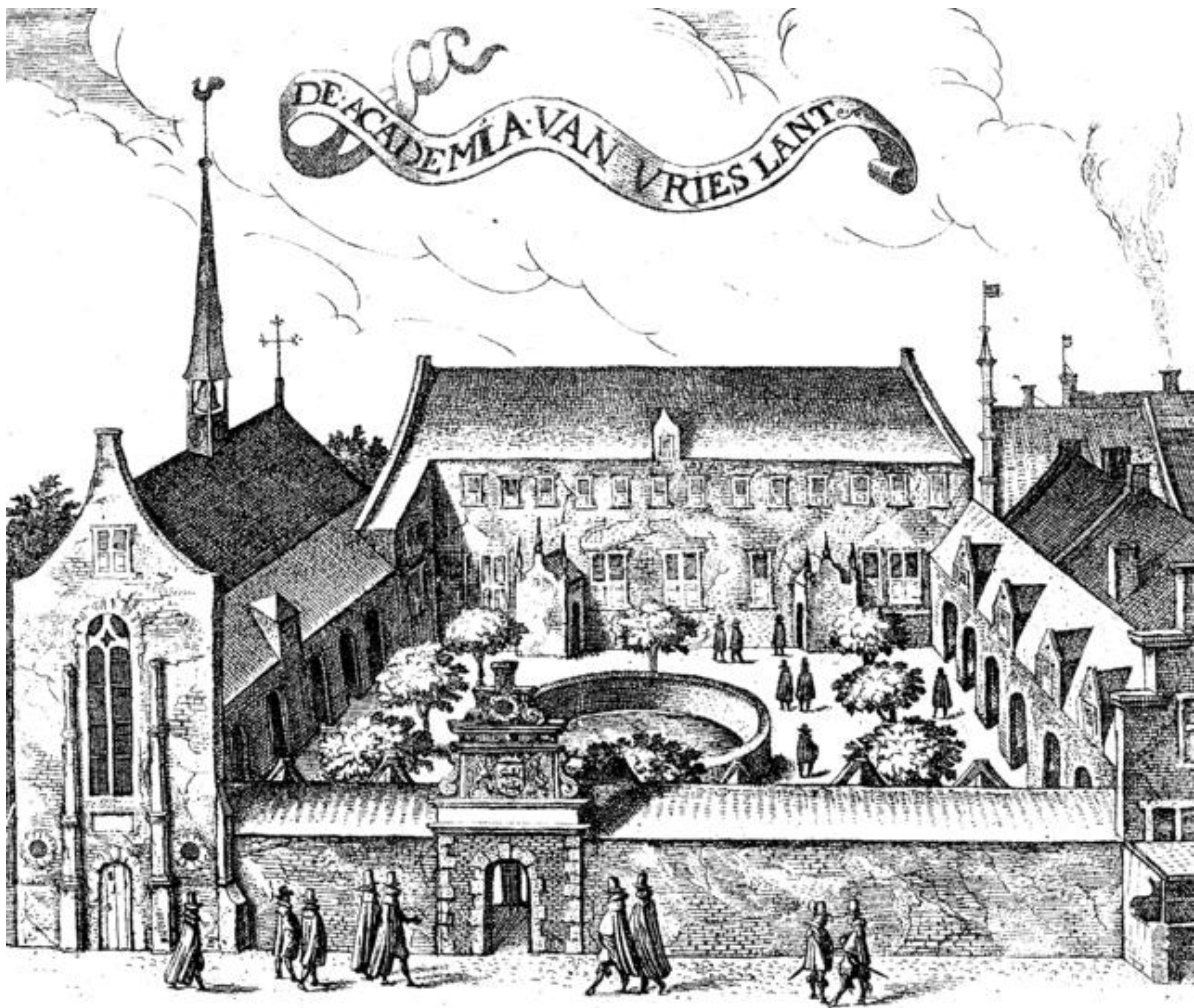
Alfred Russel Wallace (1823 – 1913)



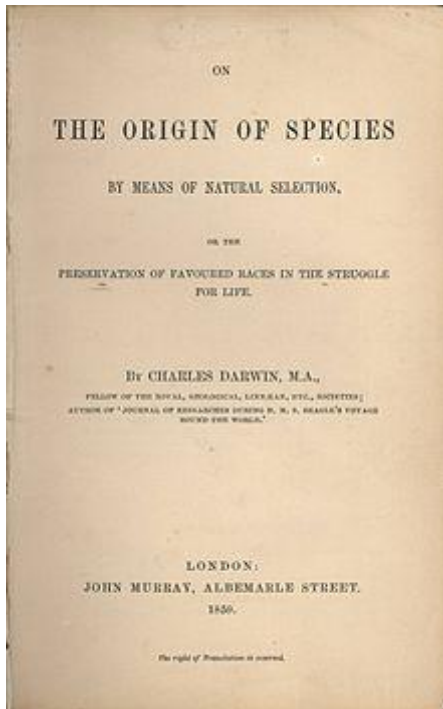
Charles Darwin (1809 – 1882).



As a commemoration of Petrus Camper (1722 – 1789) installment as "praelector" of the Surgeon's guild in 1755 in Amsterdam this painting was made in 1758 and called "Camper's Anatomy lesson"



The *Academia van Vrieslant* in Franeker (The Netherlands)



Wallace first fieldwork was in his own local community. He worked as a surveyor and collected insects. Later he had two important fieldworks in foreign parts. The first in the Amazon River basin and the second in the Malay or Indonesian Archipelago. He had a broad interest in science as well as in issues of social rights.



Bronze statue of Wallace looking at a Wallace's golden birdwing butterfly by Anthony Smith. The statue was unveiled the 7th of November 2013 outside the Natural History Museum in London.



Wallace in Singapore (1862).



Wallace and his signature on the front of *Darwinism* published in 1889.

The trip to the Amazon rainforest

Wallace was inspired by the journeys of traveling naturalists like Charles Darwin, Alexander von Humboldt and William Henry Edwards. Together with his friend Henry Bates he decided to go to Brazil in order to collect insects and animal specimens for sale and for their own collections.²⁴

The first year they collected near Belém do Pará, then explored inland separately. In 1849 Wallace brother Herbert and the botanist Richard Spruce joined them. Herbert left them after

²⁴ Knapp (1999).

a short while and died after two years from yellow fever. Wallace travelled further into the rainforest and spent four years along the Rio Negro collecting specimens and making geographical and anthropological observations²⁵. Spruce and Bates continued collecting in South America for ten years.

In 1852 Wallace embarked for England with most of his collection. The ship caught fire and most of Wallace collection was lost with the exception of a few notes and sketches. Luckily the survivors were, after ten days in an open boat, rescued by another ship and reached England after much hardship.

In London Wallace spent 18 months living on the insurance payment for his lost collection as well as from selling specimens he had sent back to Britain prior to going to Rio Negro.²⁶ He published several articles as well as two books and made a number of connections with other naturalists among them Darwin.

The expeditions to the East Indies or Malay Archipelago.

In the years from 1854 – 1862 Wallace travelled in what is today Singapore, Malaysia and Indonesia collecting specimens for sale as well as to study natural history. When he started his journey he was 31 years old and when he returned a mature man of 39. He largely financed his travels through the specimens sold. One of his collections, a set of 80 bird skeletons collected in Indonesia exist in the Cambridge University Museum of Zoology. The collected skeletons and associated documentation was part of his observations of ornithological/zoological differences across a narrow strait in the archipelago that is the zoogeographical Wallace line.²⁷

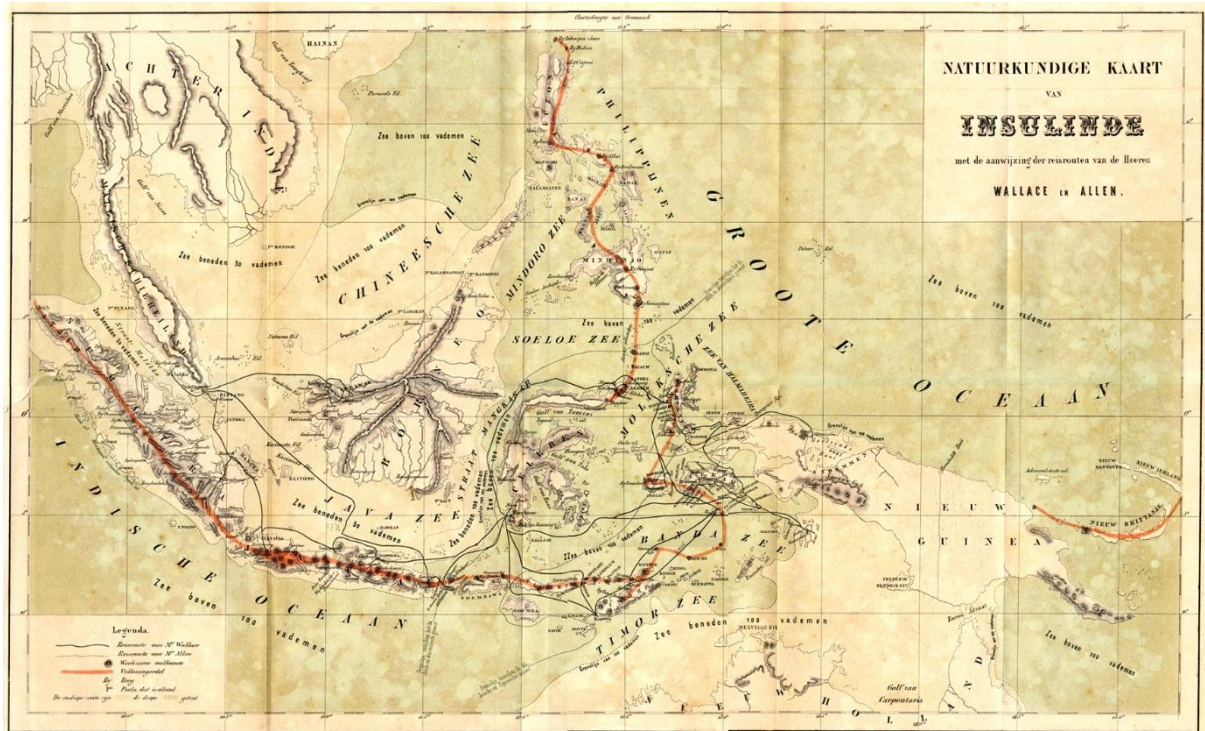
In the area travelled Wallace collected more than 126.000 specimens among them more than 80.000 beetles and many thousand new to science. During his travel he refined his theories on natural selection and evolution. In 1858 he sent a manuscript of an article to Darwin outlining his theory. Darwin initiated publishing of the article together with a description of his own theory the same year.

In 1869 an account of his travel was published dedicated to Darwin. The Malay Archipelago became one of the most popular books of scientific explorations ever. The book has never been out of print. Both Charles Darwin and the naturalist Charles Lyell praised the book. The famous author Joseph Conrad used it as a source of information for his book Lord Jim and called the book his "*favorite bedside companion*".

²⁵ Wallace (2010; 1853 a and b).

²⁶ Wallace (1889 b, 1853 and 2011).

²⁷ Raby (1996); Severin (1997); Wyhe (2013 a and b); Wallace (1869)



A Dutch map of the Malay Archipelago (Batavia) used as an illustration in Wallace “The Malay Archipelago” the thin black lines are Wallace travels and the red lines indicate the separation between the Australian influence nature from the Asia as well as chains of volcanoes.²⁸ Wallace identified the faunal divide now termed the Wallace Line, which separates the Malay Archipelago, now termed the Indonesian archipelago, into a western part in which the animals are largely of Asian origin, and an eastern part where the fauna reflect Australasia. Wallace account of his adventures and observations in what is today Singapore, Indonesia and Malaysia, at his time divided between Dutch and British colonial empires, is one of the best journals of scientific exploration ever published.



²⁸ Wallace (1869).

An illustration of a gliding tree frog Wallace discovered in the Malay Archipelago. The frog is named Wallace's flying frog (*Rhacophorus nigropalmatus*).

Biogeographical regions and zoogeography

In 1880 published *Island Life* as a sequel to *The Geographical Distribution of Animals*.²⁹ He classified different types of islands depending upon their isolation and if they had been part of any large continent.³⁰ Thus Wallace was acknowledged as the authority on zoogeography and *The Geographical Distribution of Animals* the most important text for nearly the next hundred years.



The bioregions of the world according to Wallace.³¹

The trip to the United States

Wallace spent ten months in 1886 – 1887 in the United States lecturing on a number of subjects, but mostly on Darwinism (evolution through natural selection). He spent a week in Colorado exploring the flora of the Rocky Mountains that resulted in a theory of the influence of glaciation.³² The trip was used to develop his book on Darwinism that was published in 1889.³³

In defense of Darwinism

The book Darwinism was published in 1889 and explained and defended natural selection.³⁴ He introduced the hypothesis that natural selection could drive the reproductive isolation of two varieties by encouraging the development of barriers against hybridization and thus contribute to development of new species. Individuals would, according to the hypothesis avoid hybrid matings, have more fit offspring and contribute to the reproductive isolation of the two incipient species. The theory is known as the Wallace effect.

Wallace evolutionary views diverged from Darwin's, still the two scholars stimulated each other, exchanged ideas and supported each other over a prolonged time. Even if in strong

²⁹ Wallace (2011 and 1876 a).

³⁰ Wallace (2013 and 1881)

³¹ Wallace (1876 a. and 2011).

³² Smith (2013); Wallace (1891).

³³ Wallace (1889 a)

³⁴ Berra (2013).

disagreement Wallace is the most cited scholar in Darwin's "*Descent of man.*" Wallace book on Darwinism is his most cited scientific contribution.

Interestingly Wallace thought of his ideas on evolution as developed from the social scientist Thomas Malthus (1766 – 1834) book on human population growth.³⁵

Environmentalism

Wallace warned against the impact of humans on the natural world. He pointed to the danger of the danger of deforestation and soil erosion, especially in tropical climates with heavy rainfall.³⁶ In 1911 he expressed his concern of the environment with prophetic words³⁷:

“These considerations should lead us to look upon all the works of nature, animate or inanimate, as invested with a certain sanctity, to be used by us but not abused, and never to be recklessly destroyed or defaced. To pollute a spring or a river, to exterminate a bird or beast, should be treated as moral offences and as social crimes; ... Yet during the past century, which has seen those great advances in the knowledge of Nature of which we are so proud, there has been no corresponding development of a love or reverence for her works; so that never before has there been such widespread ravage of the earth's surface by destruction of native vegetation and with it of much animal life, and such wholesale defacement of the earth by mineral workings and by pouring into our streams and rivers the refuse of manufactories and of cities; and this has been done by all the greatest nations claiming the first place for civilisation and religion!”

Wallace had the ability to listen to all people, regardless of their background. Perhaps his most important access was his ability to register data and opinions from indigenous people. Thus, he was able to tap into their accumulated knowledge and their way of understanding and analyzing their surroundings.³⁸ The farmer from Tretten represented such knowledge and tapped into the modern science as well as his own traditions.

Female emancipation and social activism

In *The Malay Archipelago* Wallace had a number of remarks criticizing the English society. Among his readers were the famous social scientist John Stuart Mill (1806 – 1873). Mill asked Wallace to join the general committee of his Land Tenure Reform Association. The purpose of the Association was to end land tenure and to distribute land to the users. However, the Association dissolved after the death of Mill in 1873 and the two scholars were never able to start their co-operation. Still Wallace continued to be active in the question of land reform. Himself having grown up in Wales he had deep insights into the social injustice of British Society. Wallace argued for state ownership of land rather than private. He was very much opposed to the position of wealthy landowners exploiting the farmers.

The newly formed Land Nationalization Society elected Wallace as their first president in 1881. In 1882 he published *Land Nationalisation; Its Necessity and Its Aims* and criticized

³⁵ Malthus (1986; 1982 original 1820 and 1798).

³⁶ Wallace (1878).

³⁷ Wallace (1914 and 1911).

³⁸ Sochaczewski (2012).

the free trade policies pursued by British authorities.³⁹ He argued that free trade gave hardship to the working class. In 1889 he declared himself a socialist, argued for female emancipation and against militarism. Many evolutionary thinkers of his time supported eugenics. He wrote "Those who succeed in the race for wealth are by no means the best or the most intelligent."⁴⁰ Such points made Wallace an important obstacle to those arguing for colonialism and racism from the point of evolutionary theories.

Wallace remained a powerful social advocate his whole life. In 1898 he published "*The Wonderful Century: Its Successes and Its Failures*"⁴¹ It was a powerful book criticizing European colonialism, the harsh criminal justice system, conditions for workers, the lack of land-reform, the lack of proper care for mentally sick and the environmental damage caused by capitalism. His last book "*The Revolt of Democracy*" pursued the same political ideas and was published just weeks before his death in 1917.⁴²

The fight for landreform was important in Norway. A system of tenant farmers, called "husmenn" or in English "housemen", was well established from the 1700 hundreds. From the middle of the 1800s emigration to America and possibilities for industrial work reduced the number of tenant farmers. Still, the system of tenant farmers⁴³ remained until laws made it possible and a legal right for the tenant farmers to buy the land they had farmed.⁴⁴ What happened in England influenced the politics of Norway, and thus Wallace had importance politically as one of many who argued for land-reform.

John Stuart Mill was one of the foremost advocates of female emancipation. Together with his wife Harriet Taylor (1807- 1858) he developed the arguments for female emancipation in "The Subjection of Women" from 1869 and in "On Liberty" from 1858.⁴⁵ Wallace argues similarly most likely inspired by the writings of Mill. In Norway the author Bjørnstjerne Bjørnson argued in the same way becoming one of the important spokesmen for female emancipation as well as other social reforms.⁴⁶

The question of vaccination.

In the early 1880's there were heated discussions of smallpox vaccination. Wallace was of the opinion that those in favor of vaccination had used sloppy statistics and that reductions in smallpox were not due to vaccination but rather better hygiene and sanitation. In addition he thought that vaccination against disease might upset the natural balance and that vaccination often was done in a sloppy and unsanitary manner and thus dangerous. The British medical establishment, the Lancet argued against and argued for compulsory vaccination. The Royal

³⁹ Wallace (1882).

⁴⁰ Wallace (1890).

⁴¹ Wallace (1898 b).

⁴² Wallace (1917).

⁴³ In England and Ireland the words cottager or crofter will usually be used to describe what in Norwegian would be called "husmenn". "Tenant farmer" points to a farmer not owning and renting the land. In practice many of the Norwegian "husmenn" had that position, even if they paid the rent through their own labour in the same way as a crofter.

⁴⁴ Engen (1979); Hovdehaugen (1975); Lous (1851); Semmingsen (1960).

⁴⁵ Hays (1951); Jacobs (2000 a and b); Mazlish (1975); Mill (1984 a og b; 1981 a og b; 1977 a og b and 1884); Mill and Jacobs (1998); Smith-Solbakken and Weihe (2010) and Stanford (2015).

⁴⁶ Bjørnson (1898); VG 1898).

Commission deciding in the question decided that vaccination should be compulsory, but made penalties for people who refused less severe.⁴⁷

Spiritualism

In the summer 1865 Wallace started investigating spiritualism. His support of spiritualism and mediums used in spiritual meetings damaged his scientific reputation. Spiritualism had a large following in England even among intellectuals.⁴⁸ In Norway the movement never seemed to gain any large following, however among lay-Christians outside the state Church as well as among some Lutherans within the State Lutheran Church there were those attracted to spiritualism. Among Norwegian authors, like Bjørnstjerne Bjørnson (1832 – 1910) and Knut Hamsun (1859 – 1952) there were a certain attraction to spiritualism.⁴⁹

Wallace interest in spiritualism illustrate that even within advocates of hard science there were those who acknowledged the super-natural as part of a possible reality. The following by important authors gave the movement a certain acceptance. Both nationally and internationally both Bjørnson and Hamsun were important authors.⁵⁰

Today spiritualism is generally frowned upon and thought of as a hoax. Most scientists of the time of Wallace thought the same, however a number of influential people in England as well as in Norway were attracted to the movement. One example in England was the influential English politician and Prime Minister Gladstone.⁵¹

Those in favor of the flat earth

In 1870 John Hampden (1819 – 1891), a proponent of the earth being flat, offered £500 to anyone who could prove a convex curvature in a body of water such as a river, canal, or lake. Wallace designed an experiment that proved his case. The judge declared Wallace the winner, however Hampden denounced Wallace a swindler. Wallace won a number of libel suits against Hampden, but the litigation was far more costly than the prize.

Discussions like the one between Hampden and Wallace are illustrating of the time period. Modern and well-acknowledged science met a strong opposition from well-entrenched dogmatic thinkers many of them fundamental Christians. That was the situation in England as well as in Gudbrandsdal.

Even if the discussion seems strange in 2015, it is important to realize that a substantial group of people still dispute the findings of modern science and even the knowledge most of us take as granted. As late as in the 1890s there were published maps proving the flat earth. In 2015 a third of all Americans believe in creationism and dispute the evolutionary theories of Darwin

⁴⁷ Wallace (1898).

⁴⁸ Moore (1972:474-500); Stubenrasuch (2012: 339-341); Windscheffel (2006: 1-29).

⁴⁹ Skålevåg (2006:46-58); Mehren (2006:30-41); Kolloen (2003 and 2004); Hoem (2013; 2010 a and 2010 b).

⁵⁰ Hamsun won the noble Prize for literature in 1929 and Bjørnson in 1903.

⁵¹ Windscheffel (2006: 1-29).

and Wallace.⁵² In the age of Einar Enge (1887 – 1964) disbelief in science as well as those dedicated to the knowledge of science existed as well.

His own struggle of financial survival

Unlike the naturalists Charles Darwin and Charles Lyell, Wallace had no family wealth and he never found a long-term salaried position. His research was financed from sale of specimens; however he lost most of those sales through unsuccessful investments. In 1881 he was, through Darwin's effort, awarded a government pension. The pension received together with the income as an author made his financial situation more secure.⁵³

Wallace managed in the end to make himself and his family a modest, but comfortable life.⁵⁴ His correspondence reveals the importance of his family and like John Stuart Mill he has no problems acknowledging the importance of his wife.⁵⁵

The example of a common man that gained influence and became an important scientist was important in order to give importance to the research and achievements of other common men and females. Regardless of social class what should count should be skills, insights and dedicated work. The farmer Einar Enge (1887 – 1964) knew that his opinions and his work as a naturalist was important. If not in his local-world at least among others – among the scholars in the world of academics.

The heritage of Wallace

Few naturalist are as important as Wallace. Still, it is important to acknowledge that he was a child of his own time.⁵⁶ Some of his views, like the one against vaccination and in support of spiritualism, is hard to understand. However, his view on evolution and his theoretical contributions will forever be among the important contributions to science. He should also be acknowledged as one of the many who argued for social reforms. His well acknowledged importance as a scientist and writer meant that his views and his support of socialism, land-reform and female emancipation had a particular importance. Even if Wallace rarely is quoted and mentioned by those writing theories of society it is easy to see in retrospect, from his writings, his contribution the development towards social reform.⁵⁷

John Wilson wrote the *The Forgotten Naturalist: In search of Alfred Russel Wallace*.⁵⁸ Russel has certainly never been forgotten and his achievement as a scientist has never been forgotten. However it is certainly true that he has been in the shadow of Charles Darwin.⁵⁹ At it is certainly true that he was not Darwin and a very independent minded thinker.⁶⁰ He has been

⁵² Aschenbach (2015).

⁵³ Benton (2013); Berry (2003); Wilson (2000).

⁵⁴ Lester (2014).

⁵⁵ Marchant (1916).

⁵⁶ Raby (2002),

⁵⁷ Lindbekk (2001).

⁵⁸ Wilson (2000).

⁵⁹ Shetrmer (2002).

⁶⁰ Quammen (2002).

called a heretic in Darwins court, but he was certainly a dedicated and trustworthy companion in environmentalism.⁶¹

The theories of natural selection addressed the issue of man's place in the universe as well as biological questions like introduction of new species⁶² His biography gives insights into a life full of controversies as well as acknowledgement.⁶³

Wallace in Tretten and Lillehammer is an important statement and reminder of the importance of Wallace, not only as a naturalist, but also as a social reformer – far outside of his native islands and tropical areas of study. It is also an important reminder of the importance of all the local naturalists who contributed to science. Einar Enge (1887 – 1964) was one of them and thanks to Marit Arnekleiv his life and dedication has been made visual to an audience in 2015.

⁶¹ Slotten (2004).

⁶² Wallace (1904; 1870; 1864; 1855)

⁶³ Wallace (1904).

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