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Published in:
Studia Theologica

Publication date:
2009

Document version
Early version, also known as pre-print

Citation for published version (APA):
Gregersen, N. H. (2009). Darwin and the Divine Experiment: Religious Responses to Darwin in Denmark: with Peter Kjærgaard. *Studia Theologica*, 63(2), 140-161.

This article was downloaded by: [Det Kgl Bibl Natl bibl og Kbh Univ bibl]

On: 1 June 2010

Access details: Access Details: [subscription number 913173208]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Studia Theologica - Nordic Journal of Theology

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713736193>

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To cite this Article Gregersen, Niels Henrik and Kjærgaard, Peter C.(2009) 'Darwin and the divine experiment', Studia Theologica - Nordic Journal of Theology, 63: 2, 140 – 161

To link to this Article: DOI: 10.1080/00393380903355031

URL: <http://dx.doi.org/10.1080/00393380903355031>

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Darwin and the divine experiment

Religious responses to Darwin in Denmark 1859–1909

Niels Henrik Gregersen and Peter C. Kjærgaard

In Denmark Darwin's theory of evolution was known early on and viewed with respect, but did not make immediate scientific converts. In the 1870s, when Darwinism was promoted by free thinkers, public debates began to flourish, but religious reactions were remarkably few and mostly undramatic. Since natural theology was not assumed by Lutheran theologians, the issue of design vs. chance was not prevalent. Discussions focused rather on scripture and the general challenge of naturalism, and if Darwin's name was included, the concern was human uniqueness and the social consequences of Darwinism. Religious responses thus targeted the materialism of semi-popular Darwinism more than the substance of Darwin's theory. Around 1900, however, many aspects of Darwin's theory were accepted. At that time, however, leading biologists found that Darwin's theory needed to be complemented by a Lamarckian emphasis on environment and adaptation. Theologians who were prepared to rethink Christianity in the light of evolution usually followed this trend. Darwin was domesticated, and brought home to the Danish public as part of the common cultural canon.

In this article we analyze varieties of religious responses to Charles Darwin's theory of evolution in Denmark. How did theologians and revivalist groups react to Darwin's *On the Origin of Species* from its publication in 1859 up to 1909, when Darwin's 100th birthday was celebrated? In what sense did the Danish situation differ from that of other countries, for example England? And how did the domestic religious traditions influence the Danish reception of Darwin?

As recent scholarship has shown, context is essential when it comes to the reception of Darwin's theory.¹ In England Darwin's work appeared in the religious climate of Victorian Anglicanism. William Paley's *Natural Theology* (1802) had informed a natural theology based on evidences of teleology in the organic world, thus offering a rational pathway from science to religion. In Lutheran Denmark, by contrast,

such a rational link was not expected, and hence not found missing in Darwin's work. Since his early attacks on scholastic theology, Martin Luther (1483–1546) had denounced natural theology as a sinful *theologia gloriae*. Moreover, all Danish pastors were familiar with Immanuel Kant's (1724–1824) dismissal of the rationality of natural theology in his *Critique of Pure Reason* (1781). It was thus commonly held that natural theology constituted a blind alley for human rationality, and a temptation to be eschewed for theology. Long before Darwin, natural theology was perceived as an outdated project.

Outline

Darwin's name was not initially associated with much alarm in Denmark. Early on, his theory was known among naturalists, and was positively reviewed, but compared to England Darwin's name only seldom figured in the debates until the 1870s. Yet Darwin's 1859 work arrived in the heydays of Danish revivalism, and in the midst of a crisis for the established synthesis between faith and knowledge in the so-called Golden Age Denmark.²

Inner Mission, organized in 1861 under the strict rule of the pastor Vilhelm Beck (1829–1901), exemplifies the silence around the name of Darwin. In the many periodicals and weeklies of the movement, we find no mentioning at all of Mr. Darwin and his evolutionary theory. The reasons for this silence will be discussed below, but as far as the textual sources can tell, the concern of *Inner Mission* was the historical-critical scholarship imported from Germany and taught at Copenhagen University. Since the 1880s the Old Testament Professor Frants Buhl had dismissed Genesis as a historical account. Theories about natural evolution imported from the island of England did not have a similar impact in the German-oriented Danish culture.

As we will see, the picture becomes more complex in the case of the Grundtvigians. They followed the theologian, hymn-writer, historian, poet and educator N. F. S. Grundtvig (1783–1872). Even though Grundtvig assumed the historical correctness of the Biblical stories, it was the living Word of Christ in the sacraments of Baptism and Eucharist (not the dead letters of the Bible) which for Grundtvig constituted the essence of Christianity. Moreover, for Grundtvig all human beings – Christians as well as heathens – are created “in the image and likeness of God.” Hence, not scientific cosmology, but theological anthropology was their main concern.

By the 1870s, however, Darwin's theory was used to promote an anti-religious naturalism by the free-thinking circle around the literary critic Georg Brandes (1842–1927). The translation of *On the Origin of Species* by the biologist and novelist J. P. Jacobsen (1847–1885) made Darwin a public name. Darwin stirred up drama, and debates began to revolve around his name, at least in the educated classes. Eventually the naturalist movement divided the Grundtvigians into a more conservative Grundtvigianism and a new group of neo-Grundtvigians who wanted to adopt – in part or wholesale – a naturalistic framework of understanding. The establishment of new groups, periodicals and high-schools was a part of this process.³

As we are going to see, however, the Grundtvigians cannot just be put into two camps, pro or contra Darwin. Even though Darwin's name became associated with a thoroughly naturalistic worldview, Grundtvigian responses were highly diverse. Dichotomous lines cannot easily be drawn. Otherwise conservative Grundtvigians could embrace parts of Darwin's view of biological evolution while rejecting other parts, in particular the so-called "ape-theory". This is no wonder since Darwin's theory itself comprises a variety of different aspects: general gradualism, common descent of apes and humans; uniformitarian laws of nature; variations of circumstance; natural selection of inherited qualities (the physical causes of which were not known at Darwin's time), group selection, and sexual selection. Neo-Grundtvigians were sometimes willing to accept Darwin as a wholesale explanation, but were after all more interested in other issues than biological explanation. We thus find within the Grundtvigian movement a great variety of positions. On the one end of the scale we find the older Grundtvigians who simply – like Grundtvig himself – took a so-called Biblical world picture for granted, usually without giving it a soteriological significance. In the centre we have the Grundtvigians who argued for some sort of convergence by accommodating some Darwinian ideas, while neglecting or criticizing others. In the other extreme, we have the group of neo-Grundtvigians that followed the Danish philosopher Rasmus Nielsen (1809–1884) who argued for a principled incommensurability between faith and knowledge.

Towards the end of the century, literalist interpretations of scripture were mostly given up among educated clergy. Accordingly, some theologians began to rethink Christian theology in the light of evolutionary theory. Our prime example here is pastor Eduard Geismar (1871–1939), who in 1903 published *Kristendom og Udvikling* [Christianity and Evolution]. Geismar accepted both gradualism and common descent, but emphasized (as was usual among biologists of the day)⁴

that Darwin's theory needed to be supplemented by a Lamarckian theory of the inheritance of acquired characteristics.

Even though Geismar cannot be said to be representative for his time, he exemplified one option of his day. And across all varieties of responses, we see a general tendency of reacting against the Darwinisms of popular culture, aligned with a progressivism with no room for religion, and against a social-Darwinism with no room for the protection of the weak. More than Darwin it was men like the German materialists Karl Vogt, Ernst Haeckel, and Ludwig Büchner, and social Darwinists such as Spencer that were seen as the enemies of faith. Or put in more proximate terms: it was the political liberalism around the literary critic Georg Brandes and his brother, the publisher Edvard Brandes, and their use of Darwin to promote atheism, which after 1871 prompted the theologians to react against the worldview packages surrounding the Darwinists.

On this background it is difficult to maintain a homogeneous picture of the religious responses to Darwin and Darwinism. As shown by the historian Jes Fabricius Møller, earlier assumptions of a principled conflict between science and religion in the latter half of 19th century Denmark are not tenable. In his comprehensive study of the reactions of Danish theologians to Darwinism between 1860 and 1900, Møller rightly observes that Darwinism does not seem to have provoked Danish theologians in particular; in the otherwise rich discussions on science and religion in the latter half of the 19th century Denmark, Darwin was not the central figure. However, we find reason to question Møller's counter-thesis that it "is difficult to demonstrate that there was, in fact, any very pronounced opposition to Darwinism among Danish theologians."⁵ This view holds true for some parties, but cannot be sustained in general. To the Grundtvigians, the so-called ape theory constituted a particular challenge that had to be met, one way or another. In this context also the wider issue, as to whether nature can be understood merely as a mechanical system or whether God is providentially active during natural evolution, occasionally came up, not only among theologians but also among biologist who already had adopted the general scheme of Darwin's evolutionary theory.⁶

In a forthcoming study, the historian of science Hans Henrik Hjermitsev has analyzed the spectrum of Grundtvigian responses to Darwinism.⁷ Hjermitsev argues that Grundtvig's preference of the living word to Scripture unwittingly gave room for a highly liberal approach to the letters of the Bible; it was this possibility that was later used by the neo-Grundtvigians when they argued for a radical separation between science and faith in line with the philosopher

Rasmus Nielsen. Now history is always more complex than storytelling can explain. Nielsen's incommensurability thesis should hardly be seen as the dominating view, though it had the advantage of relaxing conflicts. However, as Hjermitsevlev rightly points out, we find several ways to cope with Darwinism within liberal strands of Protestantism. One way is to promote a progressivist interpretation of biological evolution, as we often see in England and USA.⁸ Another way is to distinguish strictly between the realm of faith and the realm of science, as we find it in some forms of neo-Grundtvigianism as well as in German neo-Kantianism.⁹ However, there are also combinatory models, as we shall see in the work of Geismar, which may count as the most creative theological attempt to accommodate Darwin in the years 1859–1909.

Darwin without drama

As early as January 1, 1860, a personal copy of Darwin's *On the Origin of Species* came to the leading Danish scientist of his day, Professor of zoology Japetus Steenstrup.¹⁰ Steenstrup was not persuaded, however, much to the dismay of Darwin, who later wrote to his esteemed colleague at Copenhagen University: "How I wish, that you believed in evolution, for I have always honoured your many great devices in the cause of natural history."¹¹ Yet Steenstrup informed his students about Darwin's theory, and in 1863 the young zoologist, Christian Frederik Lütken, wrote a sympathetic review a 100 pages long. He welcomed a scientific theory that did not have to call upon the Creator's occasional interventions, but felt uneasy about its empirical basis: "Darwin's theory was cleverly thought and brilliantly carried out," Lütken concluded, "but it has not yet stepped out of the misty realm of hypotheses and into the bright light of reality."¹² Only Steenstrup's colleague at the University, Johannes Theodor Reinhardt, adopted Darwin's view of evolution, and thus gave the impetus to its gradual reception among younger naturalists.¹³

Darwin amid drama

A new phase began, however, when *On the Origin* was translated into Danish in 1871–2 by the young botanist and later celebrated writer J. P. Jacobsen. *The Descent of Man* was also translated by Jacobsen and appeared in 1874–75. Extracts from *Voyage of the Beagle* had been published in 1870 by the Committee for the Advancement of Public

Enlightenment. It was translated in full and published later in 1876.¹⁴ Darwin's public fame was thus in ascendance in Denmark, though significantly later than in his homeland England. For example, while the British journal *Punch* brings cartoons about Darwin's ape-theory as early as May 1861 (and then again in 1874 and 1882), the Danish *Punch* brings its cartoons as late as in two consecutive issues in June and July 1875.

The publication of the Danish translation of the *Origin of Species* received considerable public notice, not in the least because of the upcoming intellectual elite in the circle of the charismatic literary critic Georg Brandes, who in his famous lectures at Copenhagen University, later published as *Hovedstrømninger i det 19de Aarhundredes Litteratur* (1871) immediately reached a large audience.¹⁵ Brandes advocated the use of realism in literature instead of fantasy, and novelists should work in the service of progressive ideas and social reform. In this context, Darwin was taken as an icon of a new atheistic age.¹⁶

The reviews in the Danish press of the translation of the *Origin of Species* were mainly positive. However, it would still be wrong to overestimate the importance of Darwin in Denmark. Among prominent and otherwise well-informed writers, Darwin did not feature at centre stage. In his Christian ethics (*Den Christelige Ethik*, 1871–1878), the overarching figure in the Danish church, former professor of doctrine and at that time bishop of Copenhagen, H. L. Martensen (1808–1884), took issue with Karl Marx; he also argued extensively against the German materialists of his time. Darwin's name, however, does not appear in Martensen's otherwise erudite three-volume work on religion, ethics, and culture. In the chapter on science, he argued that the natural sciences themselves make assumptions based on hypotheses that cannot be evidenced: "the sort of empirical science that today carries on a controversy against faith and speculation, is in itself saturated by faith and metaphysics," he said, using physics and geology (but not evolutionary biology) as his examples.¹⁷

Already in 1849–1850 and more intensely in 1865–1869 there had been academic controversies in Denmark on the topic of "tro og viden", that is, faith and knowledge ("knowledge" comprising both philosophical reflection and empirical science).¹⁸ Martensen was the central figure and target of both debates, while the rising star of Danish philosophy, Rasmus Nielsen (1809–1884), was the young contender. In his attacks on Martensen's speculative theology, Nielsen argued for the incommensurability of knowledge and faith on the basis of Kierkegaard and Hegel. Knowledge and faith are as different as knowledge and ethics, Nielsen claimed, but may be hosted by the

same human person; indeed a fully developed human existence would comprise knowledge, ethics and religion, though without any theoretical unification. In 1867 Martensen launched a book on faith and knowledge, criticizing Nielsen's stark separation between existential faith and knowledge. Martensen also argued that Nielsen's position would neither satisfy the ambitions of Hegel's speculative philosophy, nor satisfy Kierkegaard's concept of subjectivity which showed no interest in the structures of the external world.¹⁹ But not even in this second debate did Darwin's theory figure.

In 1873, however, Rasmus Nielsen used his separation model to sort out the relation between creation faith and Darwin's evolutionary theory: "The religious concept of creation is not a concept of knowledge, but a concept of faith. Darwinism doesn't stop religion, doesn't move into the territory of faith, doesn't solve the problem of creation, doesn't denigrate the revealed Word: Humanity is created in the image of God."²⁰ Nielsen's view became a distinct position in the Danish discussion on Darwin without ever growing into a consensus position.²¹ However, as Rasmus Nielsen increasingly aligned himself with the Grundtvigians, Nielsen's views influenced a younger generation of left-wing Grundtvigians during the 1870s.²²

Inner Mission's silence about Darwin

A perusal of revivalist journals and periodicals in the period between 1860 and 1909 reveals that the debates on the historical-critical interpretation of scripture, and the more general fear of scientific materialism, by far overshadowed the more specific Darwinian challenge. The relative silence on Darwin can, of course, be interpreted as either ignorance or as strategic negligence, but it can also be seen as a sign of the relatively late arrival of Darwin as a public notoriety, as well as the relatively low importance attached to Darwin's theory until the 1870s.

The two major revivalist movements of Denmark, *Inner Mission* and *Grundtvigianism* both happened to thrive in the period between 1860 and 1880, when Darwin's theory arrived in Denmark. Revivalist groups had been active since the 1840s and some of them formed a network of evangelical preachers during the 1850s. Many of these preachers were not formally ordained but travelled around, supported by local groups of followers who were critical of the state church, in particular of the local parish pastors. In 1861, however, *Inner Mission* was reorganized by Vilhelm Beck as a movement which programmatically wanted to stay

within the Evangelical-Lutheran “Folk Church”, as a ferment of believers in a vast territory of unbelief.

Inner Mission was the movement that more than anything else highlighted the authority of Scripture. One might therefore expect to find a strong resistance to Darwin in Inner Mission circles. However, the official journal of Inner Mission, *Indre Missions Tidende* [Inner Mission Times], as well as other periodicals written for the pious lay people, such as *Almindelig Kirketidende* [General Church Times] and *Nykrystalig Samler* [New Christian Collector] do not refer to Darwin at all in the period between 1860 and 1900.²³ In fact, these journals hardly ever touch the sciences and the challenges of a philosophical materialism. Even though further studies would be needed to investigate whether this also holds true in other media (such as newspapers and sermons, and the minutes and memories from the many revivalist meetings throughout the country), the silence about Darwin in official periodicals is quite significant. The historical inerrancy of Scripture was no doubt taken for granted by the leaders and lay members of Inner Mission. A literal reading of Genesis was simply the received view. In such a state of consensus, no apologetics would be needed for making scriptural inerrancy concerning geology and biology to a matter of principle.²⁴ It seems that in the circles of Inner Mission (which mainly consisted of fishermen and small independent farmers) it was not necessary to set a date for creation, or to discuss the possibility of several new creations taking place after the deluge. Their focus was to realize the reality of one’s state of sin, to preach the gospel, and to teach personal conversion as the only way to escape eternal perdition. Since a young date of creation was taken for granted, a specific view of “creationism” was not necessary; “fundamentalism” was not yet invented. The biblical accounts were trusted, but not set forth as an independent creedal issue. “On your knees for the Bible, Professors!” is a famous quote of Pastor Beck, directed to theological professors at the Faculty of Theology in Copenhagen in 1896. But never was something like that requested of professors of geology or zoology.

Grundtvig on the divine experiment of dust and spirit

The picture is not altogether different in the other revivalist movement, *Grundtvigianism*, which grew into a national movement during the 1860s. Unlike classical Lutheranism and in stark contrast to the Inner Mission movement, Grundtvig believed in a theological legitimacy of heathenism. In his introduction to *Nordens Mythologie* [Norse

Mythology] 1832, Grundtvig argued that Christians should co-operate with “naturalists of Spirit”, by whom Grundtvig probably meant his Romantic contemporaries such as Hans Christian Ørsted. Grundtvig felt that he could share the first article of faith (on creation and Providence) with them, though not the second and third article of faith (on Christ and the Holy Spirit). Grundtvig also embraced the pre-Christian Nordic tradition as well as people of other faiths in his so-called “Mosaic-Christian View” of humanity: “Be he Christian or heathen, Turk or Jew, every man who is aware of his spiritual nature is in himself such a glorious mystery...” As created in the image and likeness of God (Gen 1:26–27), the history of humanity is evidence of the fact that man is not a beast, but a divine experiment of dust and spirit. In this context Grundtvig (long before anyone heard of Darwin’s “ape-theory”) exalted humanity above nature, while praising humanity for including nature at an elevated level:

... Man is not an ape, destined first to ape the other animals and then himself until the world’s end. Rather is he a glorious incomparable creature, in whom divine powers shall proclaim, develop and enlighten themselves through thousands of generations as a divine experiment to show how spirit and dust can permeate one another and be transfigured into a common divine consciousness.²⁵

Humanity thus stands in continuation with the world of plants and animals, in so far as the “dust” is concerned. But humans are unique in terms of “spirit”, since only human beings – and not the tweeting birds or screaming apes – are endowed with language and imagination. At this juncture, Grundtvig made use of the idea of humanity as a microcosm of macrocosm, while presupposing that the macrocosm comprises both a material and a spiritual world. “Be first a human, *then* a Christian!” was Grundtvig’s motto (the Danish version of this motto may also mean: “Be Christian in accordance with your humanity”). Thus the *imago dei* was crucial for the Grundtvigian interpretation of Christianity.²⁶

In his highly extensive literary production (around 23.000 pages), Grundtvig never refers to Darwin. Only in passing does he discuss questions of natural history. In his *Haandbog i Verdens-Historien* [A Handbook in World-history] (1833), he admits that we don’t know for sure when the world was created, since the geologists tell us that the mountains may have existed considerably longer than life. He was sure, however, that life and all species were created at once in six days in a not too distant past. In particular he took distance from ideas of common descent. “Should humanity either have created itself, or (what

makes the same conclusion) have developed itself from an oyster, a grasshopper or an orang-utan, then it would have taken time, but would probably not yet have succeeded."²⁷

These quotations from 1832 and 1833 show that Grundtvig was familiar with ideas about gradualism and common descent. Grundtvig personally knew Niels Treschow (1751–1833), professor of philosophy in Copenhagen 1802–1811 and later in Christiania, Norway. Treschow was an evolutionist who, inspired by Count Buffon and Erasmus Darwin, surmised that all mammals have developed from water-beings, even hypothesizing that the closest animal-ancestor of human beings was the manatee (i.e. the sea cow).²⁸ Grundtvig's reference to oysters, grasshoppers and orang-utans evidently has a ring of ridicule. He took Adam and Eve to be prehistoric individuals, and he even thought that Paradise, located between "the four rivers" (Gen 2:10), once existed between Ganges, Euphrates, the Nile, and the Amazon, while hypothesizing that the Earth had another shape before the deluge.²⁹ Evidently, the old-fashioned historian Grundtvig did not have much resonance with the spirit of the contemporary sciences. Grundtvig was even a life-long anti-Copernican, a rare position in 19th century Denmark.³⁰

Breaking the silence

Accordingly when late in his life the new naturalism began to capture the public scene after 1870, the Grundtvigians were suddenly pressed into a corner. Having been a dynamic intellectual force in the national-liberal era, based in the educated and well-to-do farmers, the movement reached its zenith in the 1860s, but was soon to be contested by new professional elites in Copenhagen. "Naturalism" no longer meant a Romantic naturalism in the vein of H. C. Ørsted, but a new "free-thinking" materialism which openly attacked Christianity for being stupid, backwards and oppressive. The idea of a "modern breakthrough" in the Brandes-circle gave promise of a brighter future, and of a sober-minded worldview freed from the Platonism inherent in the Romanticist era, of which Grundtvig himself was a representative.

The young Grundtvigians (considerably better educated than the adherents of Inner Mission) could no longer just presuppose the biblical chronology. Historical criticism had already been introduced to theology students at Copenhagen University decades before the German higher criticism arrived in England. By establishing his so-called Church View ("den kirkelige anskuelse") as early as 1825, Grundtvig had shown how to come to terms with historical criticism. The "New

Testament", he argued, is not first and foremost a book but refers properly to the "New Covenant", given by Christ to the Church in baptism.³¹ Not the "dead letter" of scripture (and its all too many interpretations), but the Word of the living Christ in the sacrament of baptism and Eucharist ("The Bath and the Table"), constitutes the essence of living Christianity. However, even though the Bible is not a "Word of life", but only a "Word of light", Grundtvig and the conservative Grundtvigians still presupposed the historical validity of the Biblical accounts. With the geological uniformitarianism of Charles Lyell (leaving no room for a pre-historic deluge with new laws of nature) and with the new Darwinian ideas of common descent and natural selection, the sense of an unsolvable cognitive dissonance was growing among the younger Grundtvigians.

An interesting source for understanding this development is Otto Møller, otherwise a conservative Grundtvigian (1831–1915) and one of the most respected theologians of the movement. In his exchange of long letters over a 60 year period with his friend Jakob Severin Deichmann Brandt (1831–1917), we can follow the discussion of Darwin behind the public scene. Brandt was a pastor, and also a recognized botanist who specialized in the taxonomy of lichen. January 21, 1873, Brandt sent one of his new articles to Møller on the concept of species. Brandt wrote that "the empirical study of scientific investigation is confused and muddled by the Darwinian conception of species, though I avoided to refer to Darwin by name in order not to be charged with 'bias'. On this issue I believe that Steenstrup is the only Danish naturalist who fully agrees with me, but he can also outweigh the others".³²

Apparently Darwinism had already won its day in the community of botanists, at least concerning the flexibility of species. But it is worth noting that the criticism put forward by Brandt was still empirically motivated. There is no hint of religious fear in the otherwise quite outspoken correspondence. Møller (who had a sustained interest in the sciences and subscribed to two popular science magazines) answered back on January 30, 1873, saying that "it seems to me, though, that there must be some truth in the Darwinian observations, even though there has been added to the little fraction of truth some lies that have been enlarged into a whole worldview." Otto Møller, the theologian, obviously granted Darwin the acumen of his comparative observations, but he also immediately adds a cultural concern: "It is, by the way, a lascivious stench that arises from the abyss in which Darwinists, the Society for Literature, and socialists are waltzing around each after its own melody; all this ugly nuisance that looks like science, just like the

ape looks like a human being, is without doubt toes and claws from the Animal from Jordan."³³ Both Møller and Brandt want to distinguish between facts and mere hypothesis: "It is all hypothesis and poverty of facts."³⁴ But while Brandt's concern is the scientific claim of the relative constancy of the species, Møller's concern is about the status of humanity, and the use of Darwin's ideas to form a new worldview. While Brandt dismisses the achievements of Darwin, Møller, much to the dismay of his friend, continued to read Darwin and even sympathises with his person. That Darwin is careful not to mix up science and Christianity is seen by Møller as a quality; the problem is the elevation of Darwin's theory into a general worldview: "Concerning Darwin, I have read a couple of books by him and I have enjoyed his elaborate skill for observation as well as his appropriate cautiousness regarding Christian issues; I am only laughing at the foolish hypotheses of the Darwinian school, but, by the way, these are very rare in my environment."³⁵ Darwin certainly made no converts in Brandt or Møller. But what is interesting is the total lack of debate concerning natural theology, design, providence, chance, etc. All these issues – so well-known from the discussions between Darwin, the deist growing into agnosticism, and the devout Christian biologist Asa Gray at Harvard University – are absent from the discussions between Møller and Brandt. The challenge of Darwin, one might say, was not a God-issue, but an issue of culture and values.

In general, the cultural program of Grundtvig and the Grundtvigians was to identify the basis for a creative interaction ("*Vexel-Virkning*") between Christian faith and contemporary Danish culture. But there was no attempt among theologians to stabilize religion by scientific findings. As Grundtvig had formulated the difference in 1825: one thing is the question of what constitutes true Christianity, another thing is whether Christianity is true, or not. The Grundtvigians seem to have had a safe answer to the first question by appealing to the sacraments and to the Apostolic Creed as the Word of Christ, but they had no clear answer as to the second question when Romanticist naturalism was replaced by a new materialist naturalism.

In the Grundtvigian camp, some converted from Grundtvigianism to the new naturalist worldview. The most important example was the famous Norwegian writer Bjørnstjerne Bjørnson, who left the Grundtvigians to join the idea of realistic literature, affirming nature and the natural without Romantic overtones. On a whole we find a continuous struggle among the Grundtvigians to come to terms with the new biology, evidenced in widely read novels such as the pastor-son Henrik Pontoppidan's *Lykke-Per* (1898–1904) and the neo-Grundtvigian Jakob

Knudsen's *Gjæring-Afklaring* (1902), both preceded by the novel *Niels Lyhne* (1880) by J. P. Jacobsen, Darwin's translator.

Variegated Grundtvigian strategies

In the official periodical of Grundtvigianism, *Dansk Kirketidende* [Danish Church Times], we find several interesting responses to the new situation.³⁶ However, the articles were initially not written by Grundtvigians, but by foreign scholars whose work was translated into Danish. Apparently there were no internal resources within the Grundtvigian movement to do the job.³⁷ In 1871 a report from *The Guardian* on the hot British debates around Darwin is translated. But the translator (probably Jørgen Lindberg, the brother of the editor, Niels Lindberg), adds a note in the end saying that the Danish situation is distinct from the English:

In our case the situation is different, since the newest philosophy [Rasmus Nielsen's] has evidenced that faith and knowledge are two absolutely incomparable principles, so that a view of nature that ends up denying the creation, transcends its realm and violates the proper domain of faith, just like a theology that would decide on scientific questions based on biblical language, transcends the proper domain of science.³⁸

This clean position, however, was not the only position. One of the main editors, Frederik Nielsen (professor of church history), translated an address of the German professor Christlieb originally given in New York under the title "Christianity and Science". Christlieb proceeds by a combination of (1) separating the domains of scripture and science, (2) showing their overall harmony, and (3) combating a materialist worldview that does not acknowledge the difference between laws of nature and laws of morality. First, the limit of scripture is that it "will show us the route to salvation, but not communicate knowledge of nature, natural history, or physical matters that do not concern our belief." Similarly, the sciences have their limits in not being able to understand the origin of the world. Second, on this background Christlieb finds convergences between the narratives of scripture and the findings of science. "There really is an ideal concurrence (*Samstemthed*) concerning the broader perspectives." Third, even though Genesis does not reveal the particularities of physics, which are up to scientific determination, Christlieb argues that Genesis "immediately in the first verse rules out materialism and naturalism, pantheism and emanationism." His

strategy was here clearly to absorb Darwin, while taking distance from the worldview package by which Darwinism was transported. However, “[t]he main issue of debate in the last years is of course the question of the origin of the human species.” Here Christlieb defends a young earth perspective of around 6000 years, but he is evidently more concerned with the uniqueness of humanity and our common descent from one man, Adam. The fact to be explained is humanity’s “spiritual self-consciousness” which is nowhere found in the animal world. “Millions of years and countless small steps of progress, which the sciences propound, cannot build the bridge between the moral law and the natural law.”³⁹ Evidently there is a Kantian thrust to this argument, but unlike the position that we will find later in Eduard Geismar, there is no distinction between the genesis of humankind and its intrinsic value. Christlieb clearly perceives the simian origins of humanity as an assault on the Christian view that all human beings are created in the image and likeness of God. Interestingly, however, he neither attempts to defend a natural theology, nor does he feel a need for arguing for the goodness of God in face of evolutionary suffering. The overwhelming issue is the reality of the human self-consciousness and the shortcomings of materialism. Kant, and not Paley, provides the background for critiquing Darwinism.⁴⁰

Darwinism, however, is addressed more directly in a series of critical reviews on Darwinism in *Dansk Kirketidende* 1877.⁴¹ This series is an anonymous paraphrase of a piece written by a German theologian Franz Heinrich Reusch (1825–1900), a paraphrase probably undertaken by one of the two editors of the magazine, the conservative Grundtvigians C. J. Brandt or Frederik Nielsen. Again the editors had to find foreign writers on the subject, since obviously nobody was capable to do the job within the movement. This translated piece confirms quite a few of the hypotheses of this article. *First*, the influence goes via Germany, not England. *Second*, the target is the worldview package of Darwin, as represented by Ernst Haeckel and Karl Vogt, not Darwin’s theory in itself. The passionate scientific debates about Darwin’s theories, it is said, reveal the energy usually associated with religious and political fights: “Just as socialism does not confine itself to establish a political theory, but offers a new religion, so one might say that Darwinism often has led to a new religion, or at least to a denial of the last remnants of a positive religion.”⁴² The case of Haeckel (who eventually established a “Scientific Church”) is offered as a prominent example. *Third*, the gradualist theory of natural selection is viewed with a considerable degree of scepticism, though not for religious reasons.

About Darwin's general assumption of gradualism, the following is said:

Only the future will show whether Darwin is correct on this point; one observer, or the observers of one generation, would not be able to elevate such an hypothesis to certainty. But if future scientific research shows that the researchers of the past have put too stringent limits for the transmutability of organic being, what has the Christian to fear? Any true discovery should enjoy him as a human being, and there is for faith nothing dreadful in this truth.⁴³

Organic gradualism was not the problem, as long as evolution is not a matter of blind chance but is guided by "the eye of providence."⁴⁴ Forth, the core problem lies with the simian descent of humanity. The argument is that since animals act instinctively, they do not acquire new knowledge, hence cannot ascent to the state of humanity. "The school of Darwin" proposes such a low view of the human nature that they treat the savage people – "our poor savage cousin, the Forest-Man" – unfairly. "It is regrettable that people today can seriously discuss whether human beings are only civilized animals."⁴⁵ The prominent French anthropologist Jean Luis Quatrefagues (who had discussed human fossil records with the materialist Karl Vogt at an international meeting of archaeologists in Copenhagen 1869)⁴⁶ is then quoted as saying that, as a matter of fact, "natural science knows nothing about human origins. But in the name of the same truth I dare say that we have neither had a gorilla, an orang-utan, chimpanzee or a fish or any other animal as ancestor."⁴⁷ For good or bad reasons, Darwin's theory was still perceived to be the ape-theory. Darwin's original theory of natural selection was not central to the discussion.

Rasmus Nielsen's position, however, also found spokespeople among Grundtvigians, as we saw above in *Dansk Kirketidende* 1871, under the leadership of Lindberg. However, also a more radical voice from left-wing Grundtvigianism should be mentioned. Valdemar Brücker (1852–1929) was a theologian who argued vehemently for historical criticism, the freedom from rituals in the church, and so on. Influenced by Rasmus Nielsen he adopted Darwinism. In his lecture at Sagatun in Norway 1886, he said the following:

I'm in a fully free position towards the Bible, as I am to any other book. I meet there a worldview which is not mine. . . . But I don't reject it. One example: I'm coming from geology and from Darwin (parenthetically noted we agree that Darwinism is a hypothesis, and nothing more; yet I could only wish that it were elevated to

scientific evidence; it offers such a great view of coherence, such an easy and accessible system, collects everything in a single view). That is, I'm coming to the Genesis account with these preconditions..."⁴⁸

For Brücker Darwinian evolution is used as a hermeneutical lens for reading scripture. He does not look for consonances between Scripture and Darwinian theory, since the Bible is more important than that. The Bible speaks to the individual believer about the world as created by God; that is, as having its "essential origin" (*væsentlige oprindelse*) in God. This perspective of faith is Brücker's perspective, one to which he was personally committed.

Assimilating Darwin: the case of Eduard Geismar

Not until the important work of Eduard Geismar, *Christianity and Evolution* (1903), do we find a more subtle theological response to Darwin. Pastor Geismar (1871–1939), who later in 1921 took over a professorship in systematic theology at Copenhagen University, understood well the unavoidable under-determination of theories by data. Hence he found it unfair to talk about Darwin's theory as "only a hypothesis," for the same would apply to Copernicus and any other scientific theory of general scope.⁴⁹ He also offered an even-handed analysis of Darwin's theory of selection, the role of random variation, and the "fight for existence." Against August Weissmann's idea of "the omnipotence of selection", Geismar claimed that "[b]oth adaptation and selection transform living beings slowly under the impact of the environment. The milieu is the almighty parameter that shapes all living beings."⁵⁰

This element of Lamarckism is important for Geismar's own ethico-religious theory.⁵¹ For, as he argues, "there is also an ethical selection in nature."⁵² Just as aesthetics play a role in sexual selection, moral life has its roots in two aspects of the fight for survival: in the care for one's own offspring, and in the cooperation between social groups (what we today call selection at individual and group level). Hence natural selection is not only the root of brutality, but also "the womb of ideals."⁵³ Individuals are compelled to cooperate in order to survive, and by cooperation the empathy for others are developed. There exists an instinctive dislike for hurting others as well as "a purely instinctive desire for helping others."⁵⁴

There is, in short, no absolute gap between nature and morality. Geismar, however, was aware that the very fact of cooperation remains morally ambiguous, since the desire for helping can be differentiated, so

that one only helps one's own peers, but not strangers. It is here that the philosophical question of validity comes up. The evaluation of what constitutes a morally good act can only be undertaken in the context of human evaluation. Here the neo-Kantian thrust of Geismar's position becomes visible. The subjective feeling of the moral law is a personal experience, but it nonetheless entails a postulate about an eternal law of morality,⁵⁵ comparable to the human awareness of mathematical principles, only more intimate. On this background, Geismar has no problems in accepting Darwin's theory of common ancestry. Put in Danish alliterations, the question about *genesis* differs from the question of *gyldighed*, that is, validity: "We ask why morality has validity; the doctrine of evolution teaches us how humans have arrived at that morality."⁵⁶ In the same vein, Geismar can also see chance as a route to the formation of purposiveness. "It was random events, random advantages in the fight for existence that proved efficient; it was purposiveness that became the result."⁵⁷

Geismar thus accepts the fundamental role of the principles of variation and selection, while at the same time placing Darwin's selection theory in the wider context of adaptation. Adaptation is not only about inheritance at the level of the individuals, but also a question of cooperation in larger groups that develop empathetic capacities. In his theological reception of Darwin, Geismar not only combined Darwin and Lamarck (as was usual in his days), but also Darwin and Kant. For if natural selection is a mixed bag of good and evil, only moral sense can determine what is good, and what is evil.

Grundtvigian grumblings

Let us now move from Geismar's careful examination to the responses of the Grundtvigians. *Dansk Kirketidende* honoured Geismar's book with two lengthy reviews, both highly critical. The first one was done by the systematic theologian J. P. Bang. Interestingly he doesn't at all refer to Geismar's attempt to incorporate Darwin's theory. He rather criticizes the book for its way of combining morality with happiness, and for its image of Christ.⁵⁸ The theme of Christianity and evolution is not even touched upon. So much for the interest in Darwinism from one of the movement's leading systematic theologians. Another writer, the less prominent H. P. Gjevnøe, does address Geismar's position with respect to Darwin.⁵⁹ Here we find a Grundtvigian who as late as 1904 proposes a concordist allegorical reading of Genesis. Based on the German botanist Johannes Reinke's (1849–1931) work, *Die Welt als That*,⁶⁰

Gjevnø maintains that "the principle of evolution is grounded on the work of the six days;"⁶¹ we just don't know whether the six days signify world periods, unknown to humanity, or whether creatures were created immediately, or in seminal forms.⁶² Supported by anti-Darwinian orthogeneticists such as Louis Agassiz and K. E. von Baer and the vitalist Hans Driesch, Gjevnø understands Darwin's evolutionary theory as "the one in strongest conflict with the belief in God as the creator and sustainer of life;" during evolution there is, according to Darwin, "no space for God and his sustaining power," at best his position can allow a deism.⁶³ Gjevnø therefore supports Reinke's idea of built-in seminal forms: "Like a book or a piece of art, so have also the organisms, according to my view, emerged out of spiritual work."⁶⁴ The case shows that anti-Darwinian views could still attract a Grundtvigian pastor in the beginning of the 20th century.⁶⁵

Gjevnø is hardly a representative figure within Grundtvigianism. Let us therefore end this story by giving the last word to a more prominent Grundtvigian, Eline Begtrup (1860–1947). She was a teacher at several Folk High Schools, author of several books (one on Carl Linnaeus), sister to Holger Begtrup (the editor of the 10 volume edition of Grundtvig's works 1901–1906), and herself organizer of a new High School. In the year 1909 – Darwin's centenary – she wrote three articles on Darwin and on Darwinism. Darwin was praised on par with Linnaeus: "His working field was comprehensive and his capacity for observation as fresh as a summer morning."⁶⁶ Begtrup does not hide Darwin's difficulties with belief, and his later distance to the orthodox belief of his youth. But she points out that most probably it was not science that drove him away from belief. "Many serious Christians have adopted his view without this costing them their belief;" more probably, and regretfully, Darwin experienced personal losses, and thus "lost his sense of poetry, and hardly wanted to read a line of Shakespeare, whom he had loved as a young man."⁶⁷

This psychological portrait is then followed up by an article on Darwinism from a present-day perspective. Begtrup does not hide that Darwin's theory was in a process of being framed in a broader theoretical framework. Mendel and de Vries had both shown the importance of the principle of discrete inheritance, which gives a new emphasis on microbiology through the use of the microscope, a method not used by Darwin: "It is characteristic that he [sc. Darwin] did not have confidence in an induction found by the microscope alone. But now a whole school makes use of the strongest possible lenses, and looks for inheritance in the individual cells, in small parts, of which the whole plant and animal are composed."⁶⁸

Certainly, Darwin was a great naturalist; but the times they are changing. Darwin is one among peers, and modern microbiologists are entering into new territories of the small, totally unknown to the botanizing Darwin. There is thus a slight condescending note in Begtrup's otherwise sympathetic portrait of Darwin. Darwin had become domesticated, and Darwinism no longer appeared in association with the red claws of the "Animal from Jordan". In this form, Darwin became part of the cultural canon of Denmark.

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Notes

1. For Anglophone receptions, see Ronald L. Numbers and John Stenhouse, eds., *Disseminating Darwinism: The Role of Place, Race, Religion, and Gender* (Cambridge: Cambridge University Press, 1999); for receptions in other countries such as Germany, France, Spain, Mexico, see Thomas Glick, ed., *The Comparative Reception of Darwinism* (Austin: University of Texas Press, 1972), and Eve-Marie Engels, ed., *Die Rezeption von Evolutionstheorien im 19. Jahrhundert* (Frankfurt: Suhrkamp, 1995). The most complete and updated overview available for Europe is Eve-Marie Engels and Thomas Glick, eds., *The Reception of Charles Darwin in Europe vols. I-II* (Continuum: New York, 2008).
2. See Bruce H. Kirmmse, *Kierkegaard in Golden Age Denmark* (Bloomington: Indiana University Press, 1990); Jon Stewart, *A History of Hegelianism in Golden Age Denmark* (vol. 1–2; Copenhagen: C. A. Reitzel, 2007), with literature.
3. Anders Pontoppidan-Thyssen, *Den nygrundtvøigianske Bevægelse I: 1870–1887* (Aarhus: Det danske Forlag, 1958) still offers the most detailed account.
4. Peter J. Bowler, *The Eclipse of Darwinism: Anti-Darwinian Evolution Theories in the Decades around 1900* (Baltimore: John Hopkins University Press, 1983).
5. Jes Fabricius Møller, "Teologiske reaktioner på darwinismen i Danmark 1860–1900," [Theological Reactions to Darwinism in Denmark 1860–1900], *Historisk Tidsskrift* 100 (2000): 69–92 (91).

6. For example, the Danish botanist Eugen Warming started out, in 1871, as a follower of Darwin, but denied later, in 1880, that natural selection could replace teleology, and identified, in 1910, God as the author of evolution, and built-in teleology in biological life. See Heidi Funder, "En historie om foranderlighed: Evolutionsteorien i Danmark 1860–1880," [A History of change: The theory of evolutionary in Denmark 1860–1880], *Historisk Tidsskrift* 102 (2002): 306–337 (323).
7. Hans Henrik Hjermitsev, "Not just breast-feeding animals: Grundtvigian Protestant responses to Darwinism in Denmark 1859–1914," (forthcoming). – We are grateful to Hjermitsev for communicating this study with us, and for his helpful comments to an earlier draft of this paper.
8. An example is Henry Drummond, *The Lowell Lectures on the Ascent of Man* (London: Hodder & Stoughton, 1894).
9. As we argued in a common publication: "Not Paley, but Kant and Fichte provided the platform for criticising the Darwinians, something the [neo-]Grundtvigians took to heart," (Peter C. Kjærgaard, Niels Henrik Gregersen, and Hans Henrik Hjermitsev, "Darwinizing the Danes, 1859–1909," in Engels and Glick, *Reception*, 1/154.).
10. Details in Peter C. Kjærgaard and Niels Henrik Gregersen, "Darwinism comes to Denmark: The Early Danish Reception of Charles Darwin's Origin of Species," *Ideas in History* 1 (2006): 151–175.
11. Published by Steenstrup's son as "Darwins Brevveksling med Professor Japetus Steenstrup," *Tilskueren* (1909): 217–223.
12. C. Lütken, "Darwin's Theorie om Arternes Oprindelse," *Tidsskrift for Populære Fremstillinger af Naturvidenskaben* (1863): 243.
13. In stark contrast to an earlier research consensus Heidi Funder has evidenced "the rather peaceful incorporation of a new scientific theory" in the Danish science community, "En historie om foranderlighed", 307. This interpretation is adopted in the recent standard work on this period of Danish science, Kaj Sand-Jensen, "Naturhistorie," in *Lys over landet: Dansk Naturvidenskabs Historie* (vol. 3; ed. Peter C. Kjærgaard; Aarhus: Aarhus University Press, 2006), 141–192.
14. Charles Darwin, *Om Arternes Oprindelse ved Kvalitetsvalg eller ved de heldigst stillede Formers Sejr i Kampen for Tilværelsen* (Copenhagen: Gyldendal, 1872); *Menneskets Afstamning og Parringsvalget* (Copenhagen: Gyldendal, 1874–75); *Rejseagttagelser (1835–36): Tahiti, Ny-Seland, Ny-Holland, Van Diemens Land, Kiling-Ørne* (Copenhagen: Udvalget for Folkeoplysningens Fremme, 1870); *Rejse om Jorden: Populære Skildringer* (trans. E. C. Hansen and A. Jørgensen; Copenhagen: 1876).
15. First English edition: Georg Brandes, *Main Currents in Nineteenth Century Literature* (London: William Heinemann, 1901–1905).
16. See Kjærgaard and Gregersen, "Darwinism comes to Denmark," 163–173.
17. H. L. Martensen, *Den christelige Ethik: Den specielle Deel: Anden Afdeling: Den sociale Ethik* (Copenhagen: Gyldendalske Boghandel, 1878), 336.
18. See Carl Henrik Koch, *Den danske idealisme 1800–1880* (Copenhagen: Gyldendal, 1984), 361–378 and 435–462. The second debate in 1864–1867 led to more than 25 books and pamphlets and more than 100 smaller pieces in magazines and newspapers (Koch, *Idealisme*, 436) – a considerably greater output than in the Darwin-debates of the 1870s and 1880s.
19. H. L. Martensen, *Om tro og Viden* (Copenhagen: Gyldendalske Boghandel, 1867).
20. Rasmus Nielsen, "Et Synspunkt for Darwinismen," *For Ide og Virkelighed* (1873): 459.
21. Contra Jes Fabricius Møller, "Teologiske reaktioner," 76, who argues that there was in the Danish public "practically a wide consensus about defining a sort of division of work between faith and the sciences."

22. Anders Pontoppidan Thyssen, *Den nygrundtvøigianske bevægelse*, 71–84.
23. J. F. Møller, "Teologiske Reaktionen," 70 n. 5.
24. A similar attitude can be found in other countries, even in the United States, the birthseed of modern fundamentalism. As argued by Ronald L. Numbers in *Darwinism Comes to America* (Cambridge, Mass.: Harvard University Press, 1998), 51, "[m]ost conservative Christians never expressed themselves on the matter, though many of them undoubtedly clung to the traditional view that God had created the heaven and the earth in six literal days about 6,000 years ago."
25. Niels Lyhne Jensen, ed., *A Grundtvig Anthology: Selections from the Writings of N. F. S. Grundtvig (1783–1872)* (trans. Edward Broadbridge and Niels Lyhne Jensen; Cambridge: James Clarke & Co, 1984), 41 and 49.
26. A fine English introduction to Grundtvig is available in Donald Allchin, *N. F. S. Grundtvig* (Aarhus: Aarhus University Press, 1997). On Grundtvig's pre-Darwinian concepts of organic development, see Kim Arne Petersen, "Grundtvigs natursyn," [Grundtvig's view of Nature] *Grundtvig Studier* (1989–90): 66–104, and Niels Henrik Gregersen, "Mennesket som Mikrokosmos," [Man as Microcosm] *Grundtvig Studier* (2000): 75–103.
27. N. F. S. Grundtvig, "Haandbog i Verdens-Historien," [1833] in *Udvalgte Skrifter* (vol. 6; ed. Holger Begtrup; Copenhagen: Gyldendalske Boghandel, 1907), 39.
28. See Svend Erik Stybe, "Niels Treschow: A Danish Neoplatonist," *Danish Yearbook of Philosophy* (vol. 13; Copenhagen: Munksgaard, 1976), 36.
29. N. F. S. Grundtvig, *Udvalgte Skrifter*, 6/47f. See Ole Vind, *Grundtvigs historiefilosofi* (Copenhagen: Gyldendal, 1999), 263ff. Somewhat anachronistically Vind describes Grundtvig as a "fundamentalist", 267.
30. Grundtvig's idea of a universal science comprising both nature and history has recently been presented by Bent Christensen, *Omkring Grundtvigs Vidskab* (Copenhagen: GAD, 1998).
31. *A Grundtvig Anthology*, 135 (a translation from *Den christelige Børnelærdom* [Elementary Christian Teachings] ch. 9, originally from 1857).
32. Erik Nørr, *Mellem Otto og Jakob: 61 års brevveksling mellem Gyllingepresten Otto Møller og præsten og naturvidenskabsmanden Jakob Severin Deichmann Brandt* (vol. 1; Copenhagen: GAD, 1986), 54.
33. Nørr, *Mellem Otto og Jakob*, 58.
34. Nørr, *Mellem Otto og Jakob*, 96 (Møller to Brandt, October 13, 1877).
35. Nørr, *Mellem Otto og Jakob*, 116 (Møller to Brandt, September 9, 1878).
36. For an overview of other important Grundtvigian journals we refer to Hjermitsev, "Not just breast-feeding animals," (forthcoming).
37. The first article is Frederic de Rougemont, "Mennesket og Aben eller den Nymodens Materialisme," *Dansk Kirketidende* (1867): 2–16, 19–24, 38–46, 68–77, a translation by the editor Niels Lindberg which targets the ape-theory, again without mentioning Darwin.
38. I. L., "Darwinismen," *Dansk Kirketidende* (1871): 457–460 and 522–528.
39. Christlieb, "Kristendommen og Naturvidenskaben," *Dansk Kirketidende* (1874): 321–328.
40. This also applies to the translation "Skabelsen" by G. Uhlhorn in *Dansk Kirketidende* (1875): 33–45; 49–62. Without mentioning Darwin, Uhlhorn criticizes Spinoza's pantheism and the materialism of Feuerbach, Büchner, Czulbe and Vogt.
41. Anonymous, "Darwinismen I-III," *Dansk Kirketidende* (1877): 377–388, 409–415, and 425–433.
42. Anonymous, "Darwinismen," 382.

43. Anonymous, "Darwinismen," 386.
44. Anonymous, "Darwinismen," 387.
45. Anonymous, "Darwinismen," 432.
46. As pointed out by Mike Robson, "Darwinismen i Danmark: debatten i offentlig sammenhæng," *Naturens verden* 7 (1982): 226–7.
47. Anonymous, "Darwinismen," 432–33.
48. Valdemar Brücker, "Mit foredrag på Sagatun August 1886," in *Et Udvalg af hans Artikler gennem 40 År* (ed. Poul Lindholm; Kolding: Konrad Jørgensen, 1922), 52; repr. of the same, *Højskolebladet* (1887).
49. Eduard Geismar, *Kristendom og Udvikling* (Copenhagen: GAD, 1921 [1903]), 11.
50. Geismar, *Kristendom*, 17.
51. See Jens Holger Schjørring, *Theologische Gewissensethik und politische Wirklichkeit: Das Beispiel Eduard Geismars und Emanuel Hirschs* (Göttingen: Vandenhoeck & Ruprecht, 1979).
52. Geismar, *Kristendom*, 19.
53. Geismar, *Kristendom*, 30.
54. Geismar, *Kristendom*, 32.
55. Geismar, *Kristendom*, 36.
56. Geismar, *Kristendom*, 39.
57. Geismar, *Kristendom*, 15.
58. J. P. Bang, "Kristendom og Udvikling," *Dansk Kirketidende* (1904): 1–11, 33–42, and 73–80.
59. H. P. Gjevnøe, "Bibelen, Naturvidenskaben og Kristendommen," *Dansk Kirketidende* (1904): 489–493, 505–508, 531–535, 551–553, 565–569, 596–601, and 617–622.
60. (Kiel, 1903 [1st ed. 1898, 5th ed. 1908]).
61. Gjevnøe, "Bibelen," 492.
62. Gjevnøe, "Bibelen," 493.
63. Gjevnøe, "Bibelen," 533.
64. Gjevnøe, "Bibelen," 553.
65. Other examples are the brothers Jørgen and Poul la Cour, who as scientists remained anti-Darwinian and aimed at teaching science from a historical perspective, see Hans Henrik Hjermitslev, "Brødrene la Cours kamp for naturvidenskab på de danske højskoler 1867–1908", *Slagmark* 50 (2007): 30–47.
66. Eline Begtrup, "Charles Darwin," *Højskolebladet* (1909): 225, and "Darwinisme," *Højskolebladet* (1909): 389–396. The following references are to these articles.
67. Begtrup, "Charles Darwin," 230.
68. Begtrup, "Darwinisme," 394.