

DARWIN AND PRAGUE AESTHETICS: TOWARDS THE ACCEPTANCE OF DARWINISM IN CENTRAL EUROPE

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This article considers the uncommon situation surrounding the acceptance of Darwinism in nineteenth-century Bohemia, when the diffusion and interpretation of Darwin's teachings were first undertaken, above all by two professors of aesthetics at Prague – Josef Durdík and Otakar Hostinský. Although they somewhat simplified the theory of natural selection, they understood Darwin's theory to be the arrival of a new paradigm in contrast to contemporary biologists working in the Bohemian Lands. This article presents and compares both aestheticians' interpretations of Darwinism, mainly their stance on the theory of natural selection, the possibilities of applying this theory to aesthetics and art, as well as their relationship to Darwin's interpretation of aesthetic phenomena in nature.

I. INTRODUCTION

Whereas in most countries of central Europe it was primarily biologists who contributed to the switch from earlier biological paradigms to Darwinism, it is somewhat surprising that in Bohemia aestheticians were the first to contribute to the acceptance of Darwinism.¹ As noted by the philosopher and biologist Emanuel Rádl, Czech Darwinism was at the outset formed by two professors of aesthetics, Durdík and Hostinský.² Josef Durdík (1837–1902) was probably the only Czech

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¹ My emphasis is on the reception of Darwinism amongst the Czech-speaking population of the Bohemian Lands, although intellectuals of Czech origin certainly used German as well. Durdík and Hostinský wrote mostly in Czech.

² Emanuel Rádl, *Dějiny vývojových teorií v biologii XIX. století* [History of evolutionary theories in nineteenth-century biology] (Prague: Laichter, 1909), 533–34. This chapter is included neither in the original German edition of this, Rádl's main and largest work, *Geschichte der biologischen Theorien*, 2 vols. (Leipzig: Engelmann, 1905, 1909), nor in its English edition, *The History of Biological Theories*, trans. E. J. Hatfield (London: Oxford University Press, 1930). Durdík and Hostinský were not the first Czechs to take notice of Darwinism and write about it. The zoologist and palaeontologist Antonín Frič, for example, personally participated in the first lively discussions about Darwin and his theory of evolution at Oxford in the summer of 1860. See Božena Matoušková, 'The Beginnings of Darwinism in Bohemia', *Folia Biologica* 2 (1959): 171.

ever to meet Darwin personally, and was one of the main proponents of his teachings in the Bohemian Lands (Bohemia, Moravia, and Moravian Silesia). But despite being both a Darwinian and an aesthetician, he remained immune to Darwinism in the realm of aesthetics. Otakar Hostinský (1847–1910), on the other hand, did try to work out the consequences of Darwinism for the philosophy of art. Because the acceptance of Darwinism by theorists of aesthetics and art in general (though I would not like to give the impression that it was exclusively them) represents an interesting stage in the central European diffusion of Darwinism, I present here a more detailed account of these two Prague aestheticians' work. This article introduces and compares both thinkers' interpretations of Darwinism, mainly their stance on the theory of natural selection, the possibilities of applying this theory to aesthetics and art, as well as their relationship to Darwin's interpretation of aesthetic phenomena in nature. The article will not discuss the aesthetics of nature or the history of the biological interpretation of aesthetic phenomena in nature, nor will it be an examination of Darwinism's place in culture or art theory, Czech or otherwise; its scope will be solely the works of Durdík and Hostinský and the place of Darwin's teachings in them.

There was a certain delay in reflection on, and acceptance of, Darwinism in the Bohemian Lands in comparison to the German lands or, for example, Poland.³ Rádl attributes this delay to the fact that materialism was not present in Bohemia,⁴ but there was a more complicated set of reasons for this. Besides pressure from the Austro-Hungarian state, particularly from within Church circles, the delay was related to developments within biology itself.⁵ Evolutionary thought in the Bohemian Lands already existed prior to the introduction of Darwinism as a part of German idealistic natural philosophy (*Naturphilosophie*), and we also find French influences, for instance those of Lamarck and Geoffroy. Ideas about evolution in Bohemia can be traced to the very beginning of the nineteenth century.⁶ Thus, the theory of natural selection, central to Darwin, according to which the environmentally best-adapted individuals are most likely to survive

³ For a comparative history of Darwinism in Europe, see Eve-Marie Engels and Thomas F. Glick, 'Timeline: European Reception of Charles Darwin', in *The Reception of Charles Darwin in Europe*, vol. 1, ed. Eve-Marie Engels and Thomas F. Glick (London: Continuum, 2008), xxvi–lxxii.

⁴ Rádl, *Dějiny vývojových teorií*, 533.

⁵ See Tomáš Hermann and Michal Šimůnek, 'Between Science and Ideologies: The Reception of Darwin and Darwinism in the Czech Lands, 1859–1959', in Engels and Glick, *Reception of Charles Darwin*, 199–216.

⁶ See Bedřich V. Berchtold and Jan S. Presl, *Opřírozenosti rostlin aneb Rostlinář* [On the nature of plants, or Herbarium] (Prague: Enders, 1821), 314. For more detail, see Jan Janko, *Vědy o životě v českých zemích 1750–1950* [Life sciences in the Bohemian Lands, 1750–1950] (Prague: Academia, 1997), 111–14.

and reproduce, was included with other types of evolution.⁷ For example, Ladislav Čelakovský, one of the first Czech scientific proponents of Darwinism, distinguished ten laws of evolution, of which natural selection was only one. For Josef Velenovský, a later student of Čelakovský, the number of such principles exceeded twenty; besides Darwin's natural and sexual selection he listed Lamarck's principle of direct adaptation to the environment, the inheritance of acquired traits, the principle of mutation, as well as the aesthetic principle of ornamentalism.⁸ Darwin's teachings thus became only one of several theories and hypotheses considered by Czech biologists and in no case presented a new, revolutionary, paradigm over which young and old generations of scientists were in conflict as was the case in the German lands. Rather, most biologists pushed into the background some of the revolutionary elements of the theory (for example, the idea of the struggle for life as the chief driving force of evolution). As Rádl notes, 'we did not accept Darwinism and exact science as a free, conscious decision after struggles and criticism, but instead we accepted it [...] somewhat unwittingly.'⁹

Among the arts and humanities, Darwin's teachings were discussed, but again, in general, less intensively than in the German lands.¹⁰ Where they were discussed intensively, it was most likely with a critical accent, above all in Church circles.¹¹ The anthropologist and liberal political leader Eduard Grégr summarized the situation when he wrote in the 1860s: 'Even simply uttering Darwin's name here [in Bohemia] is considered high treason!'¹² Gradually the discussion about Darwinism spread among philosophers and artists, evolutionary teachings as

⁷ This was not because Czech scientists were uninformed. Čelakovský published his theory of evolution in a series of articles starting in 1869, and summarized it in *Rozpravy o Darwinově teorii a vývoji rostlinstva* [Discourses on Darwin's theory and the evolution of plants] (Prague: Bačkovský, 1894).

⁸ Josef Velenovský, *Všeobecná botanika* [General botany], vol. 3, *Srovnávací morfologie* [A comparative morphology] (Prague: Česká akademie, 1910), 945.

⁹ Rádl, *Dějiny vývojových teorií*, 541.

¹⁰ Few works of Czech art from the 1860s to the turn of the century are influenced by the Darwinist notion of evolution. One of the important rare examples is the collection of poems *Písně kosmické* [Cosmic songs] (Prague: Grégr and Dattel, 1878) by Jan Neruda, one of the great Czech writers and journalists of the time. See Jan Neruda, *Are There Frogs There, Too?: Cosmic Songs, Number XXII*, trans. Robert Russell (Prague: Astronomical Institute, 2003). The absence is striking in comparison to the number of German-speaking artists interested in Darwinism, including Gabriel von Max, Max Klinger, Alfred Kubin, and Arnold Böcklin. See Marsha Morton, 'From Monera to Man: Ernst Haeckel, Darwinism, and Nineteenth-Century German Art', in *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*, ed. Barbara Larson and Fae Brauner (Lebanon, NH: Dartmouth College Press, 2009), 59–91.

¹¹ Rádl, *Dějiny vývojových teorií*, 540.

¹² Jiří Gabriel, 'Recepce darwinovského evolucionismu v české přírodovědě a filosofii' [The reception of Darwinian evolutionism by Czech natural scientists and philosophers], in *Antologie z dějin českého a slovenského myšlení 1848–1948* [An anthology of the history of Czech and Slovak thought, 1848–1948], ed. Miroslav Pauza (Prague: Svoboda, 1989), 97.

presented by Haeckel and Spencer appeared,¹³ and it was sometimes impossible to tell which of these thinkers contributed what, since what passed for Darwinism was often based on second-hand knowledge contaminated by other evolutionary ideas (although Durdík and Hostinský turned to Darwin practically exclusively in their writings). There was less interest in Darwin as well as in Spencer's and Haeckel's interpretations of Darwinism in the final decades of the nineteenth century in the Bohemian Lands; this was in contrast not only with Germany, but also with neighbouring Poland,¹⁴ where many more secondary works and translations were being published.¹⁵ Before the turn of the century, as in other European countries, so in the Bohemian Lands there was a move towards (neo-)vitalism, (neo-)Lamarckism, and other currents of thought, and so a pure link to Darwin cannot legitimately be made. As Rádl wrote in his *History*, at about the turn of the century: 'Darwin is dead, [...] Spencer is dead, and his philosophy has drowned in a flood of new systems.'¹⁶

Given all that, Durdík and Hostinský were rare proponents of Darwinism in Czech culture, including philosophy, from the 1860s to the 1880s. Whereas Čelakovský and several other biologists saw the theory of natural selection as only one of many evolutionary principles, one of many biological theories or methods, Durdík saw in its arrival a true paradigm shift, even though he misinterpreted and oversimplified some of its points. Hostinský not only followed Durdík in promoting Darwinism, but in many regards went even further in accepting Darwinism and the theory of natural selection – he was one of the few in Bohemia

¹³ It was Haeckel, in particular, who facilitated the acceptance of Darwinism on the Continent by introducing into it elements perceived by Continental scientists as somehow central to the science of biology: morphology, embryology, and cell theory. By contrast, Darwin devoted to morphology not more than five pages of his *Origin of Species*.

¹⁴ Rádl documents this with a long list of Polish Darwinian literature from the end of the nineteenth century. Rádl, *Dějiny vývojových teorií*, 539–40. Darwinism varied from country to country, reflecting the current interests in the natural, but also the social, sciences. Consequently, for example, social Darwinism was much more prevalent in Germany than in the Bohemian Lands.

¹⁵ Again, this was certainly not due to unfamiliarity with Haeckel's or Spencer's ideas. Rather, it was because they were discussed and consequently published less. For example, Antonín Stecker, 'Haeckel a jeho genealogické soustavy' [Haeckel and his genealogical systems], *Časopis českého muzea* 49 (1875): 153–66, and Josef Bulova, *Výklad života ze zákonů přírodních: Trest ze spisů Darwinových a Haeckelových* [An interpretation of life from natural laws: The quintessence of Darwin's and Haeckel's writings] (Prague: self-published, 1879). But translations of Haeckel's works were not in circulation. The first translation of his popular *Die Welträtsel* (1899) appeared only in 1905, under the title *Záhady světa* [The riddles of the universe], trans. Karel Malíř (Prague: Samostatnost, 1905). A translation of F. Howard Collins's abridgement of Spencer's *Synthetic Philosophy* (1889) was published in 1901 as *Herberta Spencera 'Filosofie souborná' u výtahu* [Herbert Spencer's *Synthetic philosophy*, abridged], trans. Emanuel Peroutka (Prague: Laichter, 1901).

¹⁶ Rádl, *History of Biological Theories*, 385.

to see it not just as the main force of evolution but even of culture, and in this sense he attempted to incorporate Darwin into aesthetics and art theory.

The philosophical background of both thinkers also somewhat facilitated their embrace of Darwinism. Both Durdík and Hostinský were well versed in Herbartism, a philosophical current based on the teachings of Johann F. Herbart (1776–1841). After 1848, Herbartism became the officially recommended philosophical doctrine in Austrian schools (including those in the Bohemian Lands). It was a philosophical system created in opposition to German Idealism, particularly Hegel's and Schelling's. It was a rationalist and formalistic system of thought, in which tendencies for the natural sciences were understood mechanistically, and attempting to create with them a unified world view, to be presented in education, with pedagogy becoming one of the main Herbartian disciplines.¹⁷ It 'provided a methodological basis not only for research in aesthetics, philosophy, and psychology and pedagogy, but also for the natural sciences and the adoption of modern evolutionary thinking'.¹⁸

Ethics and above all psychology and aesthetics played an important role in Herbartism. At the University of Prague these teachings, with an emphasis on psychology and aesthetics, were spread by Wilhelm Volkman (1801–1877) and in particular Robert Zimmermann (1824–1898), the author of the main book on Herbartian aesthetics.¹⁹ Durdík and Hostinský were amongst their followers at Prague. The proponents of Herbartism, thanks to their emphasis on the natural sciences and their simultaneous tendency to oppose the Hegelian evolution of the spirit, were open to Darwinian conceptions of a 'mechanistic' evolution, as was visible in the works of the Prague Herbartian professor of pedagogy and philosophy, Gustav Adolf Lindner (1827–1887), who had already, in the 1860s, called for the use of Darwin's theory, 'the unified law of evolution', to modernize Herbart's theory. His later philosophy can truly be spoken of as an eclectic synthesis of Herbartism, Darwinism, and particularly Spencer's evolutionism and positivism.²⁰

Hostinský's conspicuous interest in Darwinism's relevance to aesthetic phenomena is also properly understood as part of a general trend in the aesthetics movement away from philosophical speculation. In the second half of the nineteenth century, aestheticians consciously started to reorient their subject towards psychology, art theory, and the natural sciences, for which Herbartism, by then resembling an educational policy rather than a philosophy, offered a wide

¹⁷ Herbart is generally regarded as one of the founders of modern pedagogy.

¹⁸ Hermann and Šimůnek, 'Between Science and Ideologies', 202.

¹⁹ Robert Zimmermann, *Allgemeine Aesthetik als Formwissenschaft* (Vienna: Braumüller, 1865).

²⁰ Ivo Tretera, *J. F. Herbart a jeho stoupenci na pražské univerzitě* [J. F. Herbart and his followers at the University of Prague] (Prague: Karlova univerzita, 1989), 296.

base and in essence allowed for the establishment of aesthetics as an independent discipline.²¹ At the same time, the remaining philosophical core of Herbartism did not allow Durdík and Hostinský to attempt to anchor the explanation of the aesthetic attitude or art history in biology, nor to create a sort of biological aesthetics, as many biologists attempted (for example, Haeckel, Moebius, and Hallier), or physiological aesthetics such as Grant Allen's.²²

II. JOSEF DURDÍK

Josef Durdík had been a Herbartian when he first became interested in the teachings of Darwin. He worked intensively on paradigm shifts in science and leading natural scientists. This subject was close to him because, besides philosophy, he had also studied physics and mathematics and his initial interests were mainly in the philosophical aspects of the natural sciences, as is attested by his habilitation thesis, *Leibniz und Newton*,²³ in which he mentions that Leibniz anticipated Darwin's work. With time, however, aesthetics and philosophy²⁴ took on a more basic role for Durdík and he devoted himself mainly to the natural sciences in order to popularize them.

But Darwinism, particularly the idea of the struggle for life (the interpretation of the moving force of evolution as a fight to preserve life and secure resources amongst individual species and amongst individuals within a species, leading to the survival of the fittest),²⁵ inspired Durdík so much that he devoted not only

²¹ It is important to realize that aesthetics as a university subject in Austria-Hungary was unusual for the marked independence it enjoyed because it was not merely a part of instruction in philosophy, but instead existed at Austro-Hungarian universities in the form of, or as the main part of, a compulsory introductory course entitled *Schöne Wissenschaften*. This course was taught at Prague starting in 1763. Gradually, an independent Department of Aesthetics was established, which has, except under the Communist régime, maintained its independence up to the present day. Aesthetics as an independent part of the curriculum was also taught after 1882, when the university was divided into German and Czech parts (both Durdík and Hostinský began to teach at the Czech part).

²² Grant Allen, *Physiological Aesthetics* (London: King, 1877).

²³ Josef Durdík, *Leibniz und Newton: Ein Versuch über Ursachen der Welt* (Halle: Pfeffer, 1869).

²⁴ In addition to Herbartism, Durdík used Kant and Leibniz as his basis.

²⁵ The German and Czech words for 'struggle' (*Kampf* and *boj*) do not fully capture what Darwin intended, as he was well aware with regard to the German: 'I suspect that the German term, *Kampf* etc., does not give quite the same idea. The words "struggle for existence" express, I think, exactly what concurrency does. It is correct to say in English that two men struggle for existence who may be hunting for the same food during a famine, and likewise when a single man is hunting for food; or again it may be said that a man struggles for existence against the waves of the sea when shipwrecked.' Quoted in Eve-Marie Engels, 'Darwin's Philosophical Revolution: Evolutionary Naturalism and First Reactions to His Theory', in Engels and Glick, *Reception of Charles Darwin*, 45. Engels notes: 'The term "concurrency" has a double meaning. It can mean "competition" as well as "cooperation". Both *Kampf* and *boj* lack the latter meaning. Unlike Durdík, Hostinský struggled to include it in his discussion of the struggle for life.'

several promotional and popular lectures and articles to it, but also many university lectures²⁶ and other academic works.²⁷ This also led to his memorable visit to Darwin in Down in 1875, which he describes in a written report.²⁸ He also apparently gave Darwin false information about the Czech editions of his works, as Darwin later mentions in his *Autobiography*.²⁹

Durdík also authored several essays on defining the term 'struggle for life' and the basic theses of Darwinism,³⁰ from which it is clear that unlike many Czech biologists he understood that Darwin's theory was fundamental and groundbreaking. Durdík looked at the idea of the struggle for life from the perspective of the history of science. He was fascinated by its simplicity and explanatory potential in biology, and was interested in the historical circumstances of its development. But he had no interest at all in trying to apply the concept to other sciences or fields of study like social and ethical questions, just as he was not interested in the details and potential problems that the concept may encounter when put to use in science. This is particularly apparent in his essay on the application of Darwinism to ethics, 'Darwinism and Morality'.³¹ Here he calls attention to the fact that deriving morals from Darwinism is abuse of the theory. Scientific knowledge – here, for example, the Darwinian struggle for life – does not dictate ethics, nor should it: science merely states how things are, not how they should be. This approach was also related to the fact that Durdík did not deal with the application of natural selection to aesthetics or art. He took for granted the stark division between the natural sciences on the one side and the humanities and philosophy on the other and he was never interested in the opinions of biologists on aesthetic matters, nor did he venture to search for a biological source of the aesthetic attitude or for a proto-aesthetic

²⁶ Durdík delivered the lecture 'On Darwin's Theory' in the oldest and most important Czech artists' society, the Umělecká beseda, in 1869, and published pieces on Darwin for a general audience, such as 'Darwin (Feuilleton)', *Politik*, March 12, 1870, 1–2, and 'O nauce Darwinově' [On Darwin's theory], in *O pokroku přírodních věd* [On the progress of the sciences] (Prague: self-published, 1874), 219–33. In the academic year 1875/76, Durdík held a lecture course in German called 'Kant und Darwin'. In 1882, he included Darwin among the men mentioned in a public lecture entitled 'The Five Most Interesting Figures in the Literature of the Nineteenth Century', which led to a spat with the philosopher and later first Czechoslovak president, Tomáš Masaryk (1850–1937). The lecture was later published under the same title, 'Pět nejzajímavějších jmen v literatuře devatenáctého věku', *Květy* 1 (1883): 31–39.

²⁷ Josef Durdík, 'Darwinismus a mravouka' [Darwinism and ethics], *Paedagogium: Měsíčník výchovatel'ský* 1 (1883): 1–9.

²⁸ Josef Durdík, 'Návštěva u Darwina' [A visit to Darwin], *Osvěta* 6 (1876): 717–27.

²⁹ Charles Darwin, *Life and Letters and Autobiography* (1887; London: Watts, 1929), 59.

³⁰ For example, Josef Durdík, 'O učení Darwinově' [On Darwin's teachings], *Osvěta* 1 (1871): 45–46.

³¹ Durdík, 'Darwinismus a mravouka'.

experience in animals. In this, he was continuing in the traditions of Kant, Vischer,³² and Herbart, and he used biology as a source of interesting examples from nature, not of theories that might explain aesthetic phenomena.

His aversion to combining aesthetics with Darwinism (or biology in general) is also related to Durdík's working almost exclusively with the theses from Darwin's *Origin of Species*, and not with the later *Descent of Man*,³³ in which Darwin ascribed to living creatures the ability to experience aesthetic pleasure, mostly during the processes pertaining to sexual selection.³⁴ Durdík thus took notice only of natural selection, but ignored sexual selection, where aesthetic phenomena play a significantly larger role. After all, according to Darwin, the sense of beauty in animals and humans is one of the basic driving forces of sexual selection. In his main work, the voluminous (600-page) *General Aesthetics*, particularly in the passages devoted to the origins of art and taste and to the aesthetics of nature, Durdík does not discuss Darwin at all.³⁵ The same applies to another important book of his, written in German and published posthumously as *Darwin und Kant*,³⁶ which was based on university lectures and had already been finished in the 1870s. In this work he does not look for the theory of evolution or something akin to Darwin's theory of natural selection in Kant, as was the case in an almost identically titled work by Fritz Schultze.³⁷ Whereas Schultze tried to find signs of evolutionism or proto-Darwinism in Kant, Durdík struggled to show how Kant's philosophical project could strengthen Darwinism philosophically. Durdík subordinated Darwin's evolutionary ideas as a scientific theory to Kant's theoretical philosophy and situated it in the framework of Kantian notions of causality and purposefulness.

In his attempt to reduce Darwin's work to simply the struggle for life, Durdík went much further into reductionism than Darwin himself had intended. He underplays the complexity of Darwin's thought and in many ways also disregards Darwin's originality in looking at humans and human society.

³² Although Durdík drew much inspiration from Friedrich Theodor Vischer, especially in his main work on aesthetics, *Všeobecná aesthetika* [General aesthetics] (Prague: Kober, 1875), he opposed his Hegelianism and regarded him as a representative of what he called 'mystical aesthetics'.

³³ *The Origin of Species* was first published as *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: Murray, 1859). *The Descent of Man* appeared twelve years later as *The Descent of Man, and Selection in Relation to Sex*, 2 vols. (London: Murray, 1871).

³⁴ Durdík was familiar also with other writings by Darwin, including *The Variation of Animals and Plants under Domestication*, 2 vols. (London: Murray, 1868), yet he never took the opportunity to exploit Darwin's thoughts on aesthetics presented there.

³⁵ Durdík, *Všeobecná aesthetika*.

³⁶ Josef Durdík, *Darwin und Kant* (Prague: Papírník, 1909).

³⁷ Fritz Schultze, *Kant und Darwin: Ein Beitrag zur Geschichte der Entwicklungslehre* (Jena: Dufft, 1875).

III. OTAKAR HOSTINSKÝ

Durdík's and Volkmann's follower, Otakar Hostinský, went further.³⁸ For him Darwinism became a source of inspiration for several of his writings on aesthetics and general art theory, but also to a certain extent for his general outlook on life. In the best sense he could be labelled a positivist, who based his interpretation of the world more on the authority of science than on the authority of any religious or metaphysical convictions.³⁹ Unlike Durdík, he attempted to apply the theory of natural selection to the development and understanding of art. He did not, however, think of it as a means to explain the natural evolution of aesthetic sensibilities and art. Hostinský tried to interpret the laws discovered by biology as general motives that may help us understand art production and art history. The dissonant struggle for life was characteristic not just of natural history, but also of human history, including the history of art. He saw the evolutionary principle of the struggle for life mirrored in the basic themes of art and reflected in the subject matter of art: the general aim of all the arts was to resolve dissonance.

Hostinský's application of Darwinism to the sphere of culture was a very provocative and revolutionary idea in Czech society. He caused a scandal with his lecture on this topic.⁴⁰ He argued not only with opponents of Darwinism gathered around the magazine *Osvěta* (Edification),⁴¹ but also with Durdík. Questions of Darwinism were not of course the domain only of the natural sciences, but became the subject of debate in literary and artistic circles as well. A useful example is the important Czech author Eliška Krásnohorská, who, in a lecture at the *Umělecká beseda*, pioneered the idea that immorality in art stemmed directly from the teachings of Darwin and his followers. Such immorality had, according to her, led to French naturalism, which she considered a disgustingly unacceptable current.⁴²

Hostinský published the provocative lecture as 'Darwin and Drama'.⁴³ It represents the most radical application of Darwinism to art ever written by an

³⁸ Hostinský, in contrast to Durdík, had already emancipated himself more from Herbartism, and drew his inspiration from the natural sciences.

³⁹ Hostinský's wife explicitly characterized him as mainly a 'supporter of Darwin and Haeckel'. Miloš Jůzl, *Otakar Hostinský* (Prague: Melantrich, 1980), 174.

⁴⁰ 'O látce dramatu' (On the subject matter of drama), a lecture given at the *Umělecká beseda*, Prague, on 22 February 1873.

⁴¹ Founded in 1871, *Osvěta* was a journal publishing mostly fiction, but also educational essays. It promoted Czech nationalism and was popular in the patriotic circles.

⁴² Jůzl, *Otakar Hostinský*, 204.

⁴³ Otakar Hostinský, 'Darwin a drama', in *Studie a kritiky* [Essays and criticism] (Prague: Československý spisovatel, 1974), 27–37. Originally published as 'Darwin a drama', *Lumír* 1, no. 26 (1873): 311–14, reprinted in Otakar Hostinský, *Šest rozprav z oboru krasovědy a dějin umění* [Six discourses on aesthetics and art history] (Prague: Grégr & Dattel, 1877), 33–44. Translated as 'Darwin and Drama' in this issue of *Estetika*.

intellectual from the humanities in Bohemia. In this work, Hostinský takes the view that natural laws are valid not only for non-human nature, but for all human societies as well. And if the same law applies to humans as animals, we must, to contemplate art, take biology, specifically the evolutionary theory of natural selection, as our starting point. Furthermore, Hostinský refers to another natural principle that was discovered by Darwin, but ignored by Durdík – namely, sexual selection, which is driven by the strength, finesse, and beauty of the opposite sex, and leads to the perfection of offspring. The struggle for life and sexual selection are thus two agents controlling all human life and effort. In 'Darwin and Drama', Hostinský focuses on cases where the struggle for life and sexual selection become the stuff of art (that is, what art is about).

Hostinský argues that artists, in order to create, do not depend on generalities, but rather on singularities, on individual and specific forms. Their art is not about the struggle of humankind against nature, but about the struggle of individual people, families, and nations against each other.⁴⁴ When Darwin's ideas about evolution become the subject or theme of art, they must be individualized; something characteristic of the individual and the species must be found. A represented horse or human being must embody a type, must appear as a characteristic member of its kind, with manifest traits that indicate its difference from other kinds.⁴⁵ As a horse must be depicted so that it cannot be taken for another odd-toed ungulate, so with human beings specific, significant traits of humans, those that make us stand above all other animals, must be described: 'Where man has begun [...] to rise above the dumb creature, without of course ceasing to be a living creature subject to the same biological laws, is where the dramatic poet's subject matter begins.'⁴⁶

Natural laws or givens must be bases, but only bases, for refined human action, which essentially surpasses these laws. The two main forces of evolution, sexual selection and the struggle for life, must therefore be presented in drama in a form

⁴⁴ Hostinský, 'Darwin and Drama', 105.

⁴⁵ Ibid., 105–6. The notion of type is characteristic of classic morphology, a paradigm in the biology and the palaeontology of the late eighteenth and early nineteenth century, which investigated the metamorphoses of the structures of animal bodies (for example, Geoffroy Saint-Hilaire, Cuvier, and Goethe). It was believed that for a given species or a group of species there existed a structural pattern that could be modified to some degree, but at a certain level remained stable and 'typical'. Durdík differentiated between two kinds of natural beauty: Kantian beauty based on disinterested pleasure and beauty of type. According to him, natural scientists ignored disinterested beauty and favoured the beauty of type, that is, a match between a given specimen and its pattern that they bear in mind (its type). See Durdík, *Všeobecná estetika*, 411. Hostinský may have picked up the idea of type from Durdík.

⁴⁶ Hostinský, 'Darwin and Drama', 106.

that is characteristic of human life. And thus, according to Hostinský, sexual selection in its exalted human form appears as love, the struggle for life as an attempt at self-preservation and self-attestation and also selfishness, but without the pejorative meaning: 'Love grows from unseemly lust like a beautiful plant whose crown is adorned with a delightful, fragrant flower of pure, selfless affection.'⁴⁷ Even selfishness may appear not only in the form of the lowest greed and envy, but also as the most noble intellectual primacy. From the two basic forces of evolution thus come two basic themes of dramatic art ('exhausting the field of dramatic subject matter').⁴⁸ These, however, cannot be presented to the viewer completely mechanically; barriers to love as well as selfishness must be erected. This will result in more complicated plots and increased aesthetic pleasure on the side of the viewers.

Drama on the stage is actually a 'small, closed, independent, as well as idealized, episode of a large-scale struggle of all against all' demonstrated on the hero.⁴⁹ In the plot, original strengths meet barriers and despite conflict lead to a certain climax. According to Hostinský, drama as well as individual episodes from the struggle for life bring what a view in nature brings – namely, a view of 'gradual development and progression from lower to higher', that is, "perfection".⁵⁰ We rightfully can request this type of closure from drama as well. It should depict progress for the better and more perfect, and this progress can even be part of a tragedy or it can be accompanied by the loss of the 'good' side. 'The red thread of evil, which seems to run through all human life, therefore plays the role of dissonance which has been perfectly resolved according to aesthetic rules: evil not only serves good, but also gives birth to it.'⁵¹ Hostinský ends his reflections by concluding that Darwinism does not lead, as he says, to some kind of 'aesthetic hell'; just the opposite is the case, since it can substantiate every important dramatic requirement, and now scientifically at that, as he emphasizes.⁵²

The most clear-cut example of Hostinský's efforts to reinterpret the Darwinian principle of the struggle for life in the arts (and indeed human culture as a whole) is his paper 'Dissonance', published one year after 'Darwin and Drama'.⁵³ Here he tries to show that the term 'struggle for life' is essentially a synonym for the term

⁴⁷ Ibid.

⁴⁸ Ibid., 108.

⁴⁹ Ibid., 107.

⁵⁰ Ibid., 110.

⁵¹ Ibid.

⁵² Ibid., 111.

⁵³ Otakar Hostinský, 'Dissonance', in *Studie a kritiky*, 38–46. Originally published in *Lumír* 2, no. 53 (1874): 638–41. Translated as 'Dissonance' in this issue of *Estetika*.

'dissonance' used in musical theory.⁵⁴ Both involve conflict and contrast – principles necessary in art and aesthetics as well as in life. First, Hostinský shows how dissonance is necessary not only in music, but also in the performing and visual arts,⁵⁵ and how 'satisfying harmony' arises from the resolving of dissonance and contrast. Even in life, Hostinský argues, it only seems that the disharmony which disrupts inner tranquillity, peace, and harmony is something negative. Actually, an aesthetic perspective can make something good of dissonance that seems so bad and that naturally accompanies the struggle for survival. And this is because it forces us, by means of fantasy, to resolve these dissonances, as an artist does in his work. According to Hostinský, evil serves good as dissonance serves harmony. Whereas earlier we could have only known that based on aesthetic sensibility, without evidence, now natural science shows it to us. The evolution of organisms moves forward by the survival of better, more perfect, and more functional solutions. What from the point of view of individual life represents evil, suffering, and extinction is from the perspective of the species part of its evolution. Scientific findings only corroborate the old traditional idea about an 'artistic value of the world'.⁵⁶

Hostinský embraces the idea that the world is perfected by the struggle for life. Yet just like Durdík, he emphasizes that although science has unveiled the struggle for life in nature, that does not mean that this struggle and the cruelty of nature are something good and noble in themselves and that struggle for life should be given free reign in the realm of human culture as well.⁵⁷ The fact that we come to see that the perfection of human society is achieved through dissonance – epidemics, wars, and so forth – does not mean that we also obtain the right to incite such disasters. Like Durdík, Hostinský believes that the way things are in nature does not imply the way one ought to act.

Although Hostinský drew inspiration from Darwin, that did not prevent him from criticizing his ideas. Indeed, he often diverges quite significantly from Darwin,

⁵⁴ In his *General Aesthetics*, published a year after Hostinský's article, Durdík discusses dissonance as a means leading to a final consonance or harmony and preventing boredom (Durdík, *Všeobecná estetika*, 71–73). Unlike Hostinský, Durdík draws no far-reaching conclusions. He only states that dissonance occurs in life as well and that things like disease, sin, crime, and treason are undesirable and should be eliminated; nevertheless, it is against the background of these phenomena that life can achieve harmony, for 'without dissonance there would be no life' (ibid., 72).

⁵⁵ In this essay, Hostinský focuses on dissonance in the arts, but in the manuscripts of his university lectures on aesthetics from 1867 and 1873 he discusses examples drawn from nature as well. See Miloš Jůzl, *Hostinského pojetí estetiky a filosofie dějin umění* [Hostinský's aesthetics and philosophy of art history] (Prague: Karlova univerzita, 1985), 71.

⁵⁶ Hostinský, 'Dissonance', 120.

⁵⁷ Ibid., 119.

as we see in his essay 'On the Origin of Art',⁵⁸ in which he deals with Darwin's, as well as Darwinian, ideas. For Hostinský, as for most aesthetician-philosophers, Darwin's daring interpretations of aesthetic phenomena in nature, as published mainly in the theory of sexual selection in *Descent of Man*, based on the conviction that non-human organisms have more complicated emotive structures, were unacceptable. Whereas for Darwin the sense of beauty was already present in animals and the difference between their sense and ours was just a matter of degree, Hostinský regarded the difference to be categorical, and regarded Darwin's view as an act of impermissible anthropomorphizing. Hostinský thus anticipated some biologists' criticism of Darwin's 'aesthetics', as we can see from the rejection of these ideas not only by Darwin's opponents, but also by his followers, such as Huxley and Wallace.⁵⁹ Hostinský claimed that if a complex organ such as an arm or wing was evolved from a previous state, that did not mean we could justifiably conclude that foregoing developmental stages which do not share all the characteristics of those organs were still those of true arms or wings. It is the same with the formation of mental functions – although animal behaviour, or perception, includes elements of a later aesthetic attitude, that is not yet a truly aesthetic attitude.

That fact that some animals have a predilection for bright colours, a metallic shine, or certain musical tones, as mentioned by Darwin, is not really evidence of aesthetic emotion. It is only the equivalent of 'having a sweet tooth', and is only evidence of a pleasant feeling or sensuous pleasure. Even with sexual selection, in which these colours or sounds are put to use, they evidence not aesthetic emotion, but 'merely secondary sexual traits, the instincts of which perform services quite mechanically'; the female chooses the male whose certain sexual traits are more distinguished, 'who seems to be more of a male [...] than the others.'⁶⁰ Similarly,

⁵⁸ Otakar Hostinský, 'O původu umění', in *O umění* (Prague: Československý spisovatel, 1956), 75–108. Originally published in Otakar Hostinský, *Čtyři rozpravy* [Four discourses] (Prague: Šimáček, 1894), 13–58.

⁵⁹ See Helen Cronin, *The Ant and the Peacock* (Cambridge: Cambridge University Press, 1994); Matt Ridley, *The Red Queen: Sex and the Evolution of Human Nature* (Harmondsworth, UK: Penguin, 1995). Here, I think, philosophers of art have unjustly overlooked Darwin's aesthetics and they consider it, together with Haeckel's, Moebius's, and Portmann's ideas, to be a sort of *Volksästhetik*, a bit of intellectual handiwork belonging to biologists. See Christian Kockerbeck, *Die Schönheit des Lebendigen: Ästhetische Naturwahrnehmung im 19. Jahrhundert* (Vienna: Böhlau, 1997), 16. In recent decades, however, the situation has begun to change. See, for example, Denis Dutton, *The Art Instinct: Beauty, Pleasure, and Human Evolution* (Oxford: Oxford University Press, 2009); Ellen Dissanayake, *Homo Aestheticus: Where Art Comes From and Why* (Seattle: University of Washington Press, 1995), and Wolfgang Welsch, 'Animal Aesthetics', *Contemporary Aesthetics* 2 (2004), <http://hdl.handle.net/2027/spo.7523862.0002.015>.

⁶⁰ Hostinský, 'O původu umění', 78.

we cannot apply the term art to certain creations of animals such as the beaver dam, the bird nest, and the waggle dance of bees, because animals act instinctively without individual differentiation. But individuality is, according to Hostinský, a basic characteristic of human art. After all, artistic output is limited to only a small part of the population and it presumes special talent as well as special practice. By contrast, all animals make the same 'art' and any differences are just coincidental.⁶¹ Neither the regularity nor the exactness of some animals' creative behaviour is evidence of their making art. Although their works are 'among the most graceful and pleasant phenomena in all of nature, which is rich in all beauty and wonder,'⁶² they cannot upon closer inspection be regarded as more than simply the result of mechanical instinctive action. It could only be construed as an aesthetic interest in regularity if mechanical work did not lead to it, that is, if it were created for other than purely utilitarian reasons. In order to explain the development of regular forms, we need only turn to the mechanism and usefulness of the work, which is, moreover, instinctive. There is, Hostinský decisively claims, no sense of beauty or taste here.⁶³

Hostinský asserts that play or, generally, expression of the mental states of animals – such as birdsong⁶⁴ – is a part of animal life. These expressions can lead to 'visible regularity and delightfulness of related acts', mainly rhythmic regularity, but even here it is enough to explain them as something mechanical. Even

⁶¹ Ibid., 78–79. One could reasonably argue with Hostinský from the vantage point of today's science. In particular, the songs of several species of bird can be markedly individualized, as are certain characteristic traits of the songs of larger and smaller regional groups. It appears that some birds inherit not the genes for a certain song (just as people do not inherit the genes for a certain language), but for the ability to sing. They finish forming their song by learning from older songbirds, as well as by incorporating songs from various elements of their individual lives, for example, overheard sounds, including human ones. Similarly, bowerbirds' bowers always indicate a certain level of common technology and colour preference, but the individual selection of material, its arrangement, and so forth also play a role. Today we know that even the taste of females changes over the course of their lives, and that they have individual taste. See Seth W. Coleman, Gail L. Patricelli, and Gerald Borgia, 'Variable Female Preferences Drive Complex Male Displays', *Nature*, no. 428 (2004): 742–45. Furthermore, the application of the term 'individuality' depends on the trained eye of the observer – just as humans can barely tell apart individual differences in bird songs and bowers, so too would an observer from a different culture see much of European art as the repetition of the same pattern.

⁶² Hostinský, 'O původu umění', 79–80.

⁶³ Ibid. According to Hostinský, taste in our species is not innate. Only some conditions for taste, a disposition for understanding artistic and aesthetic notions, can be innate, and taste can be cultivated on these conditions. It cannot be taught like arithmetic or history; it is not a task solely for reason and memory; it is a matter of education in a certain way of perceiving and experiencing certain impressions and emotionally participating in them. Otakar Hostinský, 'O socializaci umění' [On the socialization of art], in *Studie a kritiky*, 186. Originally published as *O socialisaci umění* (Prague: Dědictví Komenského, 1903).

⁶⁴ This is Hostinský's example, but one could come up with others, such as rhythmical movements.

the seemingly musical output of birds, their song, is just a rhythmic means of communication, a means of expression that can at most be compared to human speech, but not to music.⁶⁵ Hostinský closes the first part of 'On the Origin of Art' with the claim that our appreciation of shapes, colours, and animal sounds is aesthetic, but we cannot attribute the same enjoyment to their bearers or 'creators' in non-human nature.

In the second part of the essay, Hostinský turns to the conditions for, and possibilities of, the origin and development of aesthetic sensibility in people.⁶⁶ The origins of art and aesthetic sensibility presume, according to Hostinský, a certain level of physical and mental maturity, such as walking erect (and he cites Herder here: 'By walking upright, human beings became artistic creatures'),⁶⁷ as well as a certain organization of social life. Primitive art then appeared in human prehistory, originating in its 'useful aspects' (for example, protection from the elements), as well as playfulness. As Hostinský writes in the vein of older theories (citing Schiller's and Spencer's ideas of understanding art as a sort of game), but also fundamentally in the vein of other biological interpretations of the origins of art:

An excess of strength that develops particularly in well-nourished organisms, unspent on the motions required for the preservation of life, cannot remain inactive, and thus manifests itself in actions that appear to be quite unimportant, because purposeless, though linked with the other occupations of man, his habits and predilections.⁶⁸

At first, practical activities of individual adult human beings are imitated (consider, for example, tribal peoples' dances of war and hunting), but they may also involve the discharging of energy without imitation, because not all dances mimic. Besides playfulness, a role is also played in this by the desire for expression and the need to inform others of one's thoughts. It is only afterwards that attention is drawn back to the actual manner of communicating, its form, that is to say, aesthetic elements, which are then intentionally cultivated and become the basis of artistic forms. Prehistoric humans were not yet 'sober and unbiased' enough to portray reality as faithfully as a modern realist artist. According to Hostinský, because of a lack of 'correct knowledge of natural things', human reason at the lowest level of evolution finds only one interpretative key for everything, which likens everything to physical and mental qualities, that is, animism. Everything in

⁶⁵ Hostinský, 'O původu umění', 80–81.

⁶⁶ Here, Hostinský has made use of much of his broad education, including not only archaeology (which he studied in combination with art history at Munich), but also an interest in ethnography and primitive cultures.

⁶⁷ *Ibid.*, 81.

⁶⁸ *Ibid.*, 92.

living and non-living nature is interpreted according to a human equivalent, and thus nature is brought to life with various beings, leading to the emergence of various 'natural myths'.

One may reasonably conclude that although Hostinský broadly accepted Darwin's theory of evolution and attempted to apply its principles to art theory in the study of the subject matter and the contents of works of art, he rejected the methodologically different approach, which sought the biological or evolutionary bases of art or aesthetic perception. His attempts at classifying the theory of natural selection were therefore not in parallel with others' attempts at establishing aesthetics on biological bases, for example, when the music aesthetician Berg attempted, in 1879, to discover music in the mating calls of the apes.⁶⁹ Consequently, Hostinský did not pay much attention to Ernst Haeckel's or Herbert Spencer's 'aesthetic' contemplations either. Although he accepted Haeckel, particularly as a proponent of Darwinism, Hostinský found nothing acceptable in Haeckel's idea that nature possessed spiritual qualities.⁷⁰ Essentially his positivist and fundamentally materialistic ideas about nature did not allow him to grant non-human organisms aesthetic sensibility, since they blindly followed natural laws and their instincts. 'Nature', in Hostinský's view, certainly 'creates', but that is not comparable to the conscious creation of an artist, just as organisms feel pleasure but not aesthetic pleasure. Hostinský's attitude here is reflected also in his art criticism. Whereas ascribing aesthetic creativity to non-human nature was championed mainly by artists and biologists connected with Art Nouveau, Hostinský was an advocate of the Realist movement in the arts – and here the natural sciences acted more as an inspiration for disinterested observation and for positivist methods of the study of facts, which was in contrast to the Art Nouveau-influenced vitalism that basically moved away from the positivist and mechanistic approach.

IV. CONCLUSION

This essay has attempted to analyse in greater detail the way in which two professors of aesthetics at Prague, Durdík and Hostinský, among the first proponents of Darwinism in the Bohemian Lands (and in Austria-Hungary in general) in the nineteenth century, interpreted Darwinism. My aim was to find the place of Darwinism within their world views and in their works and to characterize the way they interpreted Darwin's theory of natural selection.

⁶⁹ H. Berg, *Die Lust an der Musik, nebst einem Anhang: Die Lust an den Farben, den Formen und der körperlichen Schönheit* (Berlin: Behr, 1879).

⁷⁰ See, for example, Kurt Bayertz, 'Biology and Beauty: Science and Aesthetics in Fin-de-siècle Germany', in *Fin de Siècle and Its Legacy*, ed. Roy Porter and Mikuláš Teich (Cambridge: Cambridge University Press, 1990), 278–95.

Durdík was one of the first promoters and interpreters of Darwin's theory of natural selection in Bohemia and was also the only Czech to have met Darwin personally. In contrast to his biologist contemporaries, he was largely correct in believing that the arrival of Darwinism meant a turning point, the arrival of a new paradigm. On the other hand, his understanding of it was too reductionist, completely omitting, for example, the theory of sexual selection. He explicitly refuted the validity of Darwin's hypotheses for ethics and thus contributed to the way Darwinism was received in the Bohemian Lands, which differed from that in neighbouring Germany, where social Darwinism was much stronger. Since he understood the theory of natural selection as valid only for biology, but not for human society, Durdík devoted no attention to applying Darwinism or evolutionary theory to art or aesthetics.

By contrast, his younger colleague, Hostinský, went further in this same period, and attempted to apply the theory of natural selection to the development and structure of art. He began to understand the struggle for life as a basic principle of life, and essentially accepted and promoted Darwinism as a theory relevant to understanding the development of human beings and their thinking. Simultaneously, he also warned against a simplistic application of Darwinism to ethics and, like Durdík, he disagreed with social Darwinism. In the last decade of his life, he occasionally took issue with Darwin's concept of the aesthetic experience and the possibility of aesthetic perception in animals.

Both aestheticians reacted, or related, particularly to Darwin's main work – *Origin of Species* – but not to his other works, nor the works of his followers, who they rarely ever mention in their writings.⁷¹ In their efforts to reduce all of evolution to one basic principle, the struggle for life, both Durdík and Hostinský were, paradoxically, perhaps closer to today's somewhat reductive neo-Darwinism than were contemporaneous biologists.⁷² Darwin himself put great emphasis on the key role of this principle, but explicitly warned against limiting

⁷¹ Another Czech aesthetician influenced by Darwin was Miroslav Tyrš, who besides being an aesthetician and an art historian was also the founder of a mass sport and gymnastics movement called Sokol. In the manifesto of the organization from 1871, Tyrš presented physical training and sporting competition as a means to human progress in a Darwinian sense, but without the element of violent struggle. Miroslav Tyrš, *Náš úkol, směr a cíl* [Our task, direction, and goal] (Prague: Vzlet, 1930). In the early twentieth century, the physician and philosopher Karel Zítka drew heavily on Darwin in his *Aestetika přírody* [Aesthetics of nature] (Klatovy: Höschl, 1917). Zítka's work was not, however, written from the standpoint of philosophical aesthetics, but from that of biology. Later, Zítka abandoned Darwinism for vitalism. The interest of Czech aestheticians in Darwinism became the subject of research as early as in the 1950s. Jaroslava Volková, 'Darwinismus u českých herbartovců a u M. Tyrše' [The Darwinism of Czech Herbartians and Miroslav Tyrš], *Vesmír* 35 (1956): 135–37, suffers from superfluity and sketchiness, and is therefore not considered here.

⁷² Of course, they did not take into account Mendel's discoveries of laws governing heredity, which had substantially contributed to the neo-Darwinist 'New Synthesis'.

all the means of evolutionary change to it alone,⁷³ a call virtually ignored by Durdík and Hostinský.

Both for the intensity with which they dealt with Darwin and for their understanding of how groundbreaking the theory of natural selection was, Durdík and Hostinský were exceptions in nineteenth-century Bohemia, where Darwinism was only cautiously accepted and was not accompanied by any significant discussion in natural-science circles. And although their acceptance of Darwin's theory of evolution was from the biologists' point of view somewhat simplified, they certainly should be credited with introducing Darwinism to the Bohemian Lands. And Hostinský should be given credit for his efforts to establish the credentials of Darwinism in the humanities.

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⁷³ See the last sentence of his 'Introduction', in Charles Darwin, *The Origin of Species* (London: Penguin, 1985), 69, or Chapter 5, 'Laws of Variation' (*ibid.*, 173–204), where other mechanisms of evolutionary change are discussed.

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OTAKAR HOSTINSKÝ: DARWIN AND DRAMA

Darwin and drama! Many people will perhaps be seized by some kind of mysterious chilling dread when they read these two words in such close connection, side by side. Despite the sonorous alliteration, they will turn away from such a combination of terms, as if it were a hideous sacrilege committed in the holy temple of fine art. 'Darwin and drama! Is it not enough that Darwin himself dealt such a powerful, lasting blow to existing opinions about the origin not only of animals but also of man, which had been sanctified by custom and authority, which brings us people into the closest relationship with the dumb animals? Should his theory, which so mercilessly humiliates the self-confidence and aesthetic sensibility of man, be spread to other fields than those purely of natural science? Should it even dim and cool the divine enthusiasm of the artist by fraternizing with the apes?'

Such objections are common, probably because they are convenient. And yet there is not the slightest cause for any of these laments and fears at least as concerns our topic, as we shall see. The least right to them, however, would be had by someone who would surround Darwin's theory with a kind of Great Wall of China, so that it could not get into the neighbouring realms from the realm of natural science, especially not come into any, even the most distant, contact with such ideal endeavours of the human spirit as, for example, the fine arts. After all, that is precisely the magnificent sense of the ideas that the English scientist first set out in his book, *On the Origin of Species* (1859),¹ and that now reign over almost all the educated world – namely, that each science, as soon as it has subject matter in common with natural science or at least similar to it, can draw from truths that were long suspected and also partly known, but were not clearly and precisely enunciated till Darwin. Darwin's theory relates to a whole outlook on the world, not just to botany or zoology. Even before him, similar principles had been acknowledged in various fields, but now it is happening in greater measure and much more thoroughly. Thus, for example, the great importance, for social science and economics, of the theory of the conditions of the increase and decrease of individuals and species, particularly of the relationship of their number to the amount of food provided to them, of the mutual struggling, succumbing, and prevailing, both of individuals and of whole species, and so forth, in short, a theory of irrefutable laws of nature which govern every community of living

[‘Darwin a drama,’ *Lumír* 1, no. 26 (1873): 311–14, reprinted in Otakar Hostinský, *Šest rozprav z oboru krasovědy a dějin umění* [Six discourses on aesthetics and art history] (Prague: Grégr & Dattel, 1877), 33–44. This translation is of the version published in *Studie a kritiky* [Essays and criticism] (Prague: Československý spisovatel, 1974), 27–37.]

¹ [First published as Charles Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: Murray, 1859).]

organism, is as clear as day. Even the efforts of the most noble philanthropists to ensure the social order such foundations by which it could, if possible, approach the ideal of peace and happiness, an ideal that the wistful poetic folk mind places into the distant past (called 'Paradise' or 'the Golden Age'), or into the distant future ('Christ's thousand-year rule on this earth'), or into regions that are far removed from this world ('Elysium' or 'Heaven'), simply anywhere except the present woeful life on earth – even such an undoubtedly highly 'ideal' endeavour must assiduously take note of Darwin's theory, so that it can use to its benefit the natural laws that appear in the social life of man. And it is all too well known, that we can profit from the laws of nature only when we acknowledge them and, submitting to them, can also control them.

Why, then, may we not base ourselves on other views that stem from Darwin's theory, even in matters of art? Art is of course the most ideal thing that man creates; but sensible contact between that idealness and natural science does not at all present an obstacle; indeed it is more like an absolutely necessary theoretic complement to it. Nature thus sometimes provides the artist with the conditions for his creations – hence the importance of acoustics for music, optics for painting, statics for building. And at other times it provides him with his subject matter – landscape painting assumes at least some practical knowledge of the plant kingdom and minerals, figurative art requires some practical knowledge of anatomy, physiognomy, and so forth. Clearly, therefore, wherever it is a matter of a thorough, truly scientific theory of art, it is necessary to take into account all these things from the perspective of the latest advances in natural science. If some branch of art (like most of the visual arts and poetry) has man as its subject matter, it must turn directly to the scientific theory concerned with man, man as a whole, his physical and mental natures, that is, it must turn to anthropology, in the broader sense. Anthropology surely is part of natural science, because man is a mere stage (though from our point of view the highest and most perfect) in the development of organic nature. To take man completely out of his close connection with nature would mean denying a plant the soil from which it grows, in which it prospers, to which it returns. It is therefore clear that if the conditions and phenomena of life are common to both man and beast, they are subject to the same law. That is why we must take as our starting point the general theory of life, or biology, and we thus find ourselves amidst the field of natural science, in which Darwin achieved such excellent results. To avoid his genius in this is absolutely impossible. Let us now present several quite general ideas about how one may obtain a correct view, based on firm foundations, about *man as the subject matter of poetry*, mainly of the *dramatic* kind. It is mainly a matter of a clear ground plan of one chapter in the theory of drama, which is exclusively

concerned with its subject matter, in order to investigate its influence on artistic form. With only small changes one can claim the same thing about the other branches of poetry, and also about the visual arts, if it chooses man as its subject matter; but drama becomes a particularly vivid example, exceptionally useful for our purposes thanks to its manifold nature: drama affects vision and hearing, appears in time and space, and presents, apart from sense impressions, also the most abstract ideas.

Thus 'Darwin' is probably connected to 'drama'. We need just a bit of peace of mind and calm deliberation, in order to see that this starting point of ours is not so awful as it may seem at first sight. Today, everyone is utterly convinced about the connection between the physical organism of man and the organisms of animals. With regard to the mental organism, the connection is perhaps less striking, but no less bold, no less repellent. We will not discuss in detail the fact that there appear in the life of animals undeniable traces of some kind of rational, albeit quite elementary, reflection, deliberation, and judgement, which cannot simply be called mere unconscious 'instinct'; but let us recall only that we find among the 'dumb creatures', upon which proud aristocrat man is so fond of looking down disdainfully, such mental phenomena as well, which affect even the highest, most respectable fields. Do we not, after all, find stirring examples of family love, even selfless friendship, and sincere gratitude? And does this affection, particularly a loyal attachment to man, not become even self-sacrificing sometimes? Indeed, one cannot talk here about truly praiseworthy virtues, which are as conscious as in human behaviour – but no one would deny that there are certain, though very modestly developed, germs of higher mental life. People who live in continuous touch with nature and observe the animal kingdom from up close, know very well that one can, even in an animal, recognize a kind of 'good' and 'bad' nature, which can to some extent be trained, bred, or spoilt in a way similar to a child's character. Man usually looks upon all of this only through a lens tinted with particular prejudices, considering it but a reflection of perfect human nature, whereas he should see in that its first beginnings and germs. If therefore a naive poetic mind in a fable transfers human traits to an animal, then scientific investigation has to proceed in the opposite direction and to trace development also in the mental realm, from its low, inconspicuous beginnings in the animal all the way to that degree of perfection which we admire in man, who with his knowledge, art, and morality is based on the civilization of the present.

Darwin points to the two main factors of all activity in the animal kingdom, which in connection with the heredity of all deviations and peculiarities both of the physical organism and of the mental disposition are the true causes of change in species and therefore also of the sudden gradual development of

organisms from less perfect to more perfect. These two factors, though intertwined, are only different aspects of the same natural events – namely, *natural selection* and *the struggle for life*. For Nature herself sees to it that organisms continuously perfect themselves. That which is less capable of living, that which does not sufficiently meet the requirements that its environment presents to it, that which cannot adapt to the conditions on which it is entirely dependent, is – whether plant or animal – surely more likely to die than a stronger individual which in some respect or other is more able to adapt, is more capable of living. The further preservation and increase in the number of a species is therefore contributed to by more perfect individuals similarly to how it occurs in consequence of rational 'selection' in the artificial breeding of animals. It is clear that a species must acquire as much by natural selection as by artificial selection of a breed, even if not as quickly. The fact that weaker, inferior organisms die in the struggle with the conditions of life leads us to the second of the two principal phenomena, the struggle for life. If obstacles did not exist, the number of plants and animals would grow endlessly. But not only individuals get in the way of individuals; a species also gets in the way of a species, and limits its further propagation. A bitter struggle arises in which, of course, the braver, stronger, more adept, and in every way more advantageously organized individual or species prevails. The corncockle struggles not only with an unfavourable climate and its whole environment, but also with the wheat for soil, moisture, air, and light. Animals on the other hand struggle amongst each other for pasture, water, and habitat. Amongst plants and animals there are also parasites that repay their hosts with cruel ingratitude, slowly destroying them, which beasts of prey of course achieve with a single blow. And ultimately man himself is in a constant struggle with plants and animals, carried on with great superiority of power and means, and consequently also with great success. He weeds his gardens and fields, exterminates hundreds of kinds of plant, in order to be able more advantageously to use the others for himself; he mercilessly hunts all kinds of beast of prey, in order to kill a larger number of animals that are 'useful' to him; on the other hand, he defends and protects certain kinds of birds, so that they eat a large number of insects, and so forth. Activity in nature appears to us mostly to be both a bitter struggle for life and, because the conditions of life of various individuals and species cross paths in various ways, a struggle of all against all.

And are we supposed to reach some artistic or poetic subject matter by that route? Of course. But we should not forget that we are talking here about man, not about just any animal, and therefore the form of activity of life will in this case have, apart from those general features, also its own special, exclusively human, characteristics. It is necessary above all to consider that the artist who wants to

present some human action in a play is not concerned with all natural phenomena in which the individual vanishes for good, but with individuals who acquit themselves as individuals. We will not talk here about that struggle for life, which predominates amongst the human race as a whole and, on the other hand, the rest of nature, about the struggle with the elements, with plants, with animals, but rather about the struggle for life, which people, individuals, families, parties, and nations engage in amongst themselves, in other words a struggle in which individuals participate on both sides. This struggle, or actually its result, is itself of course natural selection, aiming towards strengthening and enhancing the prevailing individuals and also whole communities, and consequently of benefit to mankind in general. But, in our case, another, special, means of selection is of particular importance, which the cultivator, Nature, herself does not make alone on her big farm, but rather man, the individual, makes it in his closest circle, moving, directly, though not consciously, towards the final perfection of future progeny and therefore the whole species: it is, to use a Darwinian term again, *sexual selection*. This selection too is guided by strength, skilfulness, beauty, and any other kind of advantage of the individual that is of course chosen by an individual of the opposite sex.

The struggle for life and sexual selection will therefore be the main factors, almost the poles of human activity, wherever life is depicted in dramatic art. Here, of course, poetry must illumine its subject matter with its own brilliance, and thus elevate it to the heights of beauty. And it is precisely the laws of beauty which require as decisively as possible that in those two motives there is, apart from the universal biological foundation, also something human in the narrower sense of the word, that is, characteristic of man as man. For, if an individual of some species is depicted, one must first and foremost see to it that the main weight is placed on the characteristics of the species, and that such an individual is made a true type of a certain species, certainly not some universal stereotype, which would be equally applicable to even another species, for example, to a whole genus or a whole family. If a painter depicts a horse, he will surely not be satisfied with the mere figure of a quadruped mammal, nor with the mere figure of any odd-toed ungulate (to which belong also the donkey, the Mongolian wild ass, the zebra, and the quagga); rather he must bear in mind the figure of a horse, and must therefore see to it that all special characteristics of this species suitably stand out. The horse itself will be considered all the more beautiful the more visibly appear the special features that make a horse a horse and essentially distinguish it from all other animals, even related ones. In other words, the more perfect that horse will be as a horse, the more horse-like it will be. And so too it is with man. If the instincts which man has in common with animals, providing he does indeed

share them, were to become the sole subject matter of artistic creation, for example, of the poetic art, the picture would lack the inescapably necessary characteristic of man, and that would be a shortcoming and flaw simply from a purely aesthetic perspective. In our case therefore neither the struggle for life nor sexual selection can lack, in addition to its own universal biological basis, the decisive *special human characteristic*. *Where man has begun* (according to the general consciousness for which the artist creates) *to rise above the dumb creature, without of course ceasing to be a living creature subject to the same biological laws, is where the dramatic poet's subject matter begins*. Consequently, even if no moral, social, or generally cultural considerations existed, we should still have to demand of an art whose subject matter was man characteristics of pure humanity, which raise our being above the animal, just as we demand precise and strictly special characteristics of the species in an artistic interpretation of each animal and each plant. We therefore see that there is nothing in this which would frivolously reduce human value, so long as here too, in the field of art theory, we look at man from Darwin's natural science standpoint.

But in order for us not to give cause for the least offence or misunderstanding, let us, when considering man, also use words for the two leading biological factors different from those we have so far chosen. Sexual selection will appear to us in its more noble human form, as *love*, and the struggle for life as the endeavour for *self-preservation* and *self-assertion*, in short, *selfishness*, but without all the moral censoriousness otherwise associated with the word.

Love grows from unseemly lust like a beautiful plant whose crown is adorned with a delightful, fragrant flower of pure, selfless affection, not excluding even the sacrifice of one's own life, and based on recognition of any kind of value of the beloved person, in other words some kind of aesthetic judgement, in the broadest sense of the word, including appraisal that is moral and intellectual. And thus selfishness too will strive to defend not only its physical being, but also its intellectual intentions and interests, and will do so by direct attack, both actively and by passive defence, and will thus become in general a love for its own individuality, from the most serious and most noble self-awareness of its own intellectual superiority all the way to the most vulgar ruthless avarice and envy. Those are the two sources from which dramatic art weaves its – *sympathetic* and *idiopathic* – themes. If we consider what has been outlined so far, we easily get some idea of the demands that the subject matter itself makes on the artist.

If one does not want a work of art to have a completely smooth, mechanical, progression – which may, like a simple line in its regularity, still have a certain aesthetic element, but is not enough in itself to be a work of art because of its uniformity –, the two motives, love and selfishness, must therefore be provided

with obstacles that cause an abrupt or slow departure from that straightforward direction, and thereby, as angled lines (for example, a star) or a curve (a circle, an ellipse), enable a more complicated, more diverse, aesthetic structure. The required obstacles cannot, however, completely disrupt or destroy those motivations of human behaviour. To achieve that aim, the power of the obstacles would, in comparison with the power of the motivations, have to be infinitely great, and the power of the motivations would therefore have to be infinitely small, which would surely cause an utterly unaesthetic asymmetry. Consequently, a mutual collision and struggle of the motivations and the obstacles would arise, as would a *dramatic conflict*, which of course, like any other dissonance in art, must be settled and 'resolved' in a suitable manner, in compliance with aesthetic taste, in graceful harmony. We therefore have before us the struggle of the individual or individuals with obstacles (other individuals), which leads to some kind of satisfying end or, in other words, *drama appears to us from this standpoint as a small, closed, independent, as well as idealized, episode of a large-scale struggle of all against all*, which permanently rules both nature and human society. On the basis of everything said so far about the inescapably necessary characterization of man as man, there can be no doubt that this struggle need not always be only a material struggle in a drama, that it can sometimes be exclusively intellectual, but never exclusively physical.

But if the conflict in this drama is not to become merely an external collision of powers that exist completely independent of each other, if the action in the drama is therefore not to lack internal, organic unity, the conflicting elements must meet and clash at least at one common point in the work of art, that is, in the *hero of the drama*. This concentrated conflict is transferred to the innermost being of the hero, and becomes either tragic or comic. Such a conflict deep within the hero must of course be a conflict of various opposing motivations, which again stem either from love or from selfishness. The fact that these motivations must be conscious again stems from the fact that self-confidence is a necessary sign of human nature. If, then, serious moral duties of any consequence are in conflict, the hero becomes tragic but if he clashes with only petty, unserious interests, he becomes comic. Nevertheless, in a work of art as large and complicated as a drama there is probably more than one conflict. Because of the great number of interests and characters relating to each other, a great number of diverse dramatic conflicts also arise, either homogeneous, that is, all tragic (as in most tragedies) or all comic (as in a very few comedies and farces), or heterogeneous, that is, partly tragic, partly comic (as in a considerable number of tragedies and in almost all modern comedies, in which we find many serious moments, on which we would need to put great emphasis in order for them to become truly

tragic moments). There is surely no need to demonstrate that the main, central conflict, which in its own way creates the whole action, adds its tragic or comic nature to the whole drama, and that the tragic quality or comic quality of this conflict consists in the quality of the effective motives (obligations and interests), as well as in the greatness and seriousness of the aims towards which the hero's actions are heading, and not in the way in which the emerged conflict is resolved, in other words, for example, whether the action finishes with the physical death of the hero or not.

Both of the motives, love and selfishness (in the sense explained here), are not merely convenient obvious examples; they are outright categories, exhausting the field of dramatic subject matter. We can understand this more easily if we recall the various forms and various stages of development in which they can appear. How many stages lead us, for example, from love, which is based on the magic effect of irresistible sensual love, all the way to enthusiastic, though also delirious, platonic love, whose self-sacrificing nature can culminate even in the most cruel self-denial. We will certainly not stop here, at the love of a man for a woman or a woman for a man. That love itself directly becomes a source of family love, and family ties are then the basis and prerequisite of the whole social order. In other words, love for kin, love for tribe, and love for nation all stem from the same root. Ultimately, one can also include in the same category of sympathetic motives friendship in which affection emerges directly from a favourable impression of a strange figure, and perhaps not from a merely random correspondence of benefits, opinions, endeavours, and so forth. Such a correspondence of benefits, opinions, endeavours, and so forth implies only an alliance, the origin of which must be sought in self-assertion and self-preservation.

If any obstacles are presented to the endeavour to prove one's love with a deed, a struggle with those obstacles will take place, which is the actual subject of the drama. It can, for example, be a 'life and death struggle', but it is not yet 'a struggle for survival'. Indeed, the opposite: in the struggle for love the hero often sacrifices not only his material life, but also his dearest intellectual interests. A real 'struggle for survival' arises from the endeavour to save oneself and gain recognition, in other words, from an endeavour that was originally selfish. The endeavour probably need not always be related to preservation or acquitting the whole character of the dramatic hero; a single mental act suffices here, for example, an act of will, which, if developed and conscious, appears in defence as an unwillingness to yield and in an attack as being power hungry. It does not depend here on what the aim of this will is. A domineering man can demand, for instance, the most arbitrary thing, which would never be worth his seriously fighting for; but if he runs into resistance, he cannot bear it and will wage even the most bitter

battle, simply to destroy or break that resistance, not because he wants *this* or *that*, but because he simply *wants* something, and others are defying his will. In such a case, the will to prove one's love in any way can be the subject matter. The struggle that arises from this, after all, is mainly a struggle for the assertion of will, in other words, only a special form of struggle for (intellectual) life; love as a mere pretext or occasion is, then, only secondary. What is essentially different is a struggle whose sole motive is love, whose sole aim is requiting that love. We then see that both of our basic motives are quite different from each other, even though closely intertwined.

It is clear that selfishness in our sense of the word includes a wide variety of ways of self-assertion and self-preservation, looking after the smallest of our goods and chattels, our material property, or any kind of petty personal profit, just like looking after the highest moral interests – including, for example, martyrdom for virtue and also – intellectual – martyrdom for truth. Each of these means of self-preservation and self-assertion can also further relate to broader spheres. It may be a matter of the existence or domination of a family, tribe, nationality, religious conviction of a community, successes of political parties, the rights of social classes or of whole states, and so forth. But that is not the same as what we previously saw as the spreading of love to wider spheres, even the widest, that is, to the nation and the homeland. There it was a matter of the individual proving his love to a larger whole, for example, the nation. Here it is a matter of self-preservation of the whole itself. There, the individual was the hero and the nation could easily remain outside the struggle. Here the whole nation is the hero and the individual is a hero only indirectly, as part of the whole.

So much for the motives, which are the actual subject matter of the dramatic poet. To go into further detail would be a tedious and dreary undertaking if it were not enlivened by abundant examples from dramatic literature, which could of course make what has been presented here more graphic and more interesting. But that would require detailed and copious analyses of individual plays. Considering the complexity and intricacy of the action, the great number of characters, interests, motives, and conflicts, which the more attentive observer will also find in the smallest theatre play, the pointing out of absolutely simple, transparent cases – and this is mainly what it would be about – cannot be done in just a few words.

How one can look at the *ending of a play* from the perspective that was pointed out in this discussion should now be briefly mentioned. If the dramatic action is only an episode in a great struggle of all against all, one should probably expect from it the same direction and the same success as we see in the whole. Natural (and sexual) selection, which is a resultant of the universal struggle for life (and

for love), causes in the great stream of the history of mankind gradual development and progression from lower to higher, from simpler to more organized, from uniform to diverse, in other words, what we people, from our standpoint, call 'perfection'. After all, even in its most terrifying form, in the bloody garb of war, a struggle of all against all, despite its own abomination, and despite its sad consequences, is in the end greatly to the benefit of mankind by its huge exertion of all kinds of material and intellectual power. Indeed, this struggle in many respects also provides the universal civilizing activity with abundant impulses that cannot be substituted for by anything else. And, on the other hand, people long ago became accustomed to seeing the main guarantee of all kinds of progress in the tamest, most civilized form of the struggle for life, in 'competition'. The red thread of evil, which seems to run through all human life, therefore plays the role of dissonance according to aesthetic rules: evil not only serves good, but also gives birth to it. In that serious, indeed majestic, opinion there is no room at all for pessimism. And that is surely why we are permitted to demand also of a work of art, that the conflict which is its very essence not turn out in the end to be fruitless, pointless, trivial, even if individual examples seemed to us here or there to be similar to those in reality. In the ending of the play we shall rightly look for some kind of *progress towards the better, towards the more perfect*. And the more clearly and obviously the progress is pointed out, the more ideal the play is meant to be, that is to say, the more we expect it to concentrate the things that are in fact scattered, remote from each other, and sometimes accessible only to a keen-sighted observer of the great natural and historical whole, into a smaller, tighter frame, and intensify that into a clearer, livelier picture. But that is not to say that the characters which represent the principle of good in the play ultimately always need to have the upper hand. Rather, it only means that the overall final tally should one way or another be more favourable than the initial tally, so that the action on the whole moves forward, not backwards. If it is only a matter of benefits for the acting characters, this forward motion can relate either to the momentary state of affairs (fortune taking a turn for the better) or to their permanent traits (their improvement, becoming wiser). Obviously, the idea for which the hero is fighting can prevail, even if the fighter himself dies. If, however, the hero loses his material life, without helping his idea to victory, the conflict is quite often decided, for the moment, in favour of the evil element: the writer then gives us some guarantee that the representatives of good have not been sacrificed in vain, needlessly. He opens up future prospects, which show us that the momentary success of evil is not the final victory, and that what arouses sympathy and respect in us sooner or later proves its validity, again with the help of the noble sacrifice that has just been performed. Without such

a prospect, the struggle would have been at first sight finished, but the conflict would not have been resolved and reconciled harmoniously. It would have resounded in the cruel discord of pessimism. And, after all, the writer should intensify and idealize that which in reality is beautiful and noble, not that which is ugly and hideous.

Darwin and drama! Will we still be seized by some kind of mysterious chilling dread when we read these words in close connection, side by side? Hardly. We have discovered that the path on which we set out does not lead to aesthetic hell, to the sheer denial of all beauty and all ideals. We have found out that the theory that looks at the subject matter of drama through the eye of 'Darwinism' need not in its consequences be any worse than any other theory. On the contrary, the fact that every serious requirement of the art of drama, if it concerns man as the subject matter of a work of art, can be perfectly explained and justified by this theory. But such a theory (to which, of course, only the most modest attempt and start has been made here) should surely possess one undeniable, important advantage. It should stand on the rock-solid basis of natural science. And that too is something!

Translated from the Czech by Derek and Marzia Paton

OTAKAR HOSTINSKÝ: DISSONANCE

If a debate breaks out amongst musicians, something that happens quite often, people say, almost as a matter of habit: 'What a strange bunch, those musicians! They are always in dissension, cannot bear each other, quarrel and argue all the time, even though they are the ones who should best know, and appreciate, peace and harmony, divine *harmony*.' What would happen if we turned it round a bit? Perhaps it is precisely because no one else is as familiar with the importance and value of dissonance as they are, no one else is on such good terms with it, no one knows how to deal with it as well as musicians do – that is why they have the least cause to fear dissonance or steer clear of every instance of it. After all, they know that every instance of dissonance must ultimately 'be resolved' and turned into satisfying harmony. Even if it is only in jest when the notorious cantankerousness of those ordained in the art of music is thus explained, the matter itself, that is, the natural development of these indisputably justified opinions about dissonance on the basis of musical experience, is something we should surely take quite seriously. Considering that music in general, perhaps more than any other art, provides formulas of universal aesthetic proportions and forms in complete, unclouded clarity and precision, we thus also learn best from music what dissonance actually means for art. The most widespread view on the subject – that is, that dissonance as an effective contrast to consonance performs an excellent service for this highly important aesthetic element as a kind of foil, in order for it to stand out more and delight us with its heightened pleasantness – still does not seem to me to touch upon the most important aspect of the question. Another account leads us to consider that, apart from the livelier, more effective, emphasis of harmony that results from juxtaposing it with disharmony, the perfect resolution of dissonance provides us with an aesthetic experience that is in itself new, absolutely special, and different from simple harmony. But the greatest advantage which admitting dissonance provides to the fine arts has to be seen in *its immense enrichment of artistic means*. The most obvious example is that of music.

As is well known, we have only two consonant chords: the major (*dur*, hard) and the minor (*moll*, soft). If dissonance were not used, the harmonic aspect of the art of music would be completely exhausted by these two triads. And if we now juxtapose this destitution with the royal splendour of modern harmony,¹

['Dissonance', *Lumír* 2, no. 53 (1874): 638–41. This is a translation of the version published in *Studie a kritiky* [Essays and criticism] (Prague: Československý spisovatel, 1974), 38–46. The editorial footnotes are taken from that edition.]

¹ [In the music of the Romantics and the Neo-Romantics]

who could, off the top of his head, enumerate *the vast range of consonances* (in the broadest sense of the word, that is, groups of simultaneous tones), which we now use in polyphonic music? The musician will therefore no longer call dissonance a 'necessary evil', but will rather call it a true blessing.

And as in music, so too in the other arts. In the field of literature the most inconspicuous *joke*, as well as the most majestic form of poetry, is based on dissonance and its resolution, that is *drama*, whose soul and essence is dissonance in human behaviour, that is, *conflict* and its aesthetic, perfectly reconciling, resolution. It is plain as day, that, in order to benefit beauty, dissonant proportions have to be used in the visual arts somewhat differently from how they are used in music and poetry, which move in the continuous flow of time. After all, the question that Lessing was concerned with a century ago in his renowned *Laocoon*,² the essay with which he began what is in many respects a new era of research on aesthetics, can be defined quite simply as a question of whether one can use dissonance in a spatial art, and if so, then to what extent. Indeed, even a first look must convince everyone that aesthetic *contrast*, to whose great power the fine artist so gladly bows down, is actually not based on anything other than, again, dissonance.

But dissonance is not merely a matter of admitting, out of higher considerations, the discordant sound of two simultaneous tones in music or the similar conflict of two simultaneous ideas in poetry and so forth. Those are only its simplest, most primary forms. *In certain conditions one can violate not only the basic form of that harmony of simultaneous tones or ideas, but also every other aesthetic rule.* The result of every such violation is a discordant, disharmonic proportion, *and the musician knows the conditions, under which dissonance becomes possible and permissible in the fine arts as the rules of resolving dissonance.* Many readers may worry that this statement might be intended as a prescription, which seeks to defend and excuse all artistic abandon and eccentricity, and that arbitrariness would then reign supreme in art, followed by ugliness, instead of laws and beauty, and that, indeed, perhaps the discipline of aesthetics itself would lose the ground beneath its feet and would ascribe only a conditional obligatoriness to its own statements. By no means! Just as the admission of dissonance in music does not put an end to musical beauty, nor will it ever do so in the future (indeed, on the contrary, it always only enriches it with ever new harmonic forms), nor will it cause any decline in the field of art, as long as universal validity is ascribed to the aesthetic proportion of resolved dissonance, which is fitting and proper.

² [Gotthold Ephraim Lessing, *Laocoon: Oder; Über die Grenzen der Malerei und Poesie; Mit beiläufigen Erläuterungen verschiedener Punkte der alten Kunstgeschichte* (1766; Stuttgart: Reclam, 1994).]

Even if the creative hand of the artist were to become free of all rules of art theory, it must nevertheless submit to one thing: the rule of dissonance. Even the boldest spirit must, without grumbling, bow down his defiant head to it, as if it were the most supreme of all rules. Who would not then recall the well-known 'unity of necessity and freedom realized in the fine arts', which, after Kant, became one of the principal bywords of idealist aesthetics? The extent to which this unity expresses the relation between the artist's creative spirit and aesthetic norms is explained by the view of the aesthetics of form, which we have just become acquainted with. And it certainly does so as soberly and simply as it does precisely and comprehensibly. Is some evidence, then, still required to show that the 'formalist' perspective is also capable of answering these questions, which are veiled in other aesthetic trends, even if in the most magnificent garb of arrogant phrases that supposedly soar high above mere 'form' in the metaphysical ether? Behold, here again is such evidence. But, let us return to the matter at hand. Let the musician or the poet present us with even the harshest dissonance, let him place side by side even the harshest contrasts. That surely will not worry us at all as long as the dissonances and contrasts have a justified place, a justified extent in the overall structure, and if, in the end, they are resolved in perfectly reconciling harmony.

Of course, the kind of artist who would evoke evil spirits without being able to exorcise them again, who would stand before his dissonances perplexed and helpless like the sorcerer's apprentice in Lucian's well-known story,³ who faced a broom that had been brought to life, such an artist would have to be mercilessly condemned by us, for he would have sinned against the supreme law of beauty.

The great importance of dissonance for the fine arts is obvious simply from these few remarks. One need not expand on the fact that it also relates to the field of art history. The way dissonance is used in art, the freedom that is granted to it, and the limits that are set on it are usually different in different nations and at different times. But precisely this difference of opinion about dissonance is extremely typical of the nation and the time. *The history of dissonance is the history of artistic taste.* But that is not all. The aesthetic form of resolved dissonance has its validity and importance *even far beyond the bounds of the field of art*; it builds new worlds and tears down old ones and is the most powerful driving force of humanity on the road of progress. And this role of dissonance should be demonstrated by our discussion.

If one looks over the whole wide world, one finds very many things indeed that disrupt desired peace and quiet and harmony, and consequently in the most

³ [A tale recounted by Euclates in Lucian's *Philopseudes* (Lover of lies).]

diverse ways also offend the aesthetic sense that in every respect desires harmony and perfection. One need not consider here what vexes us and thus awakens our instinct for self-preservation, which is indeed at its very foundations selfish. Wherever we look, there are enough things that palpably offend our quite objective sense of beauty: from the morning frost, which has burnt the delicate spring flowers that had prematurely bloomed into their full charm, all the way to the plague, which turned its cursed tracks to highly populated communities that had abounded in intellectual and material prosperity; from the singing lark that is seized in the sharp talons of the sparrowhawk to the repulsive events of the St Bartholomew's Day Massacre and the Sicilian Vespers;⁴ from the futile toil of the poor ant, which wants beyond its strength to drag a weed to its dwelling, to a small nation's desperate struggle for mere existence, drowning in a great sea of foreign elements. Everywhere some discord mixes into the harmony of the universe. Everywhere we find *evil*, to a greater or lesser extent. One resists evil with all one's being simply because the beautiful ideal picture seems to be violated by it. But what should one do? One cannot deny the existence of evil; for it too urgently and irresistibly insists on being recognized. We can rid ourselves of it only in very rare and relatively petty cases; indeed, we are usually unable to do anything but moderate and weaken to some degree the consequences of inevitable evil.

The natural disposition of man in this struggle between optimism and pessimism does not so easily become a victim of the latter. His aesthetic sensibility unrelentingly insists that the harsh dissonances in nature, in life, are resolved in history. And if in this case the physical eye and theoretical reason helplessly shrug their shoulders, there is nothing to be done except for *imagination* to grasp the matter. By means of its divine spark, imagination brings light into the absolutely hopeless darkness of pessimism, and conjures up before the mental eye a perfected picture of a world ruled by supreme wisdom and supreme love. It is the Providence of the ruler of the world, which admits evil, because Providence is able to enslave it completely and force it into service to the benefit of its intentions, which are infinitely good, though unfathomable to us limited human spirits. *Evil therefore serves good*. But even if the grand opinion about Providence has contributed considerably to calming the human mind, such a resolution of dissonance does not yet satisfy it.

An idea as universal and abstract as this misses the point and remains hanging in the air if we do not have clear, incontrovertible proof and evidence. But until

⁴ [The St Bartholomew's Day Massacre took place in Paris on the night of 23 August 1572 and involved mass killings of Protestants by Roman Catholics. The Sicilian Vespers is the name of a popular uprising in Palermo, at Easter 1282, against French rule, resulting in the killing of thousands of French men and women.]

these are found, this idea must at least be stripped of its excessive generality and abstraction. It must be given a certain relationship to particulars, which are closest to man anyway and therefore have the greatest effect on him. An unhappy good man on the one hand and a happy bad man on the other – those are harsh dissonances which grossly offend our sense of justice. And we can see to the bottom of all these individual cases and become convinced that, in this case, evil has not served good at all, that Providence here did not let in evil only to the benefit of its good intentions. Here too imagination attends to the wounds of reality. Aesthetic sensibility tells us that there *ought to be* justice, retribution. The imagination – animated by the desire for the resolution of those dissonances – adds that justice, retribution, *must be*, and that it *is*. Thus is born the opinion about the future world, where all the undeserved earthly suffering of good people will be substituted for many times over by pleasures for evermore, where the punishments that the wicked have escaped in this life will be carried out mercilessly and as severely as possible. The driving force of those dissonances is so great and irresistible, that man, who dreams up the untold delights of heaven and indescribable torments of hell, confuses a merely aesthetic reason for the true cause, and firmly believes in the existence of his own immortalized demands. And this opinion about just vengeance after death – undeniably again magnificent and poetic – finally provides humanity with that long-sought and desired moral consolation; faith in a better life in the next world erects strong dams against theoretical and practical pessimism. And what is the actual cause of these bold, serious reversals and advances in the *Weltanschauung* of mankind? The irresistible aesthetic instinct, aiming for the resolution of dissonance.

Let us now turn from the heavenly heights and the infernal depths, and look around, into our closest society, for it contains heaven for many and hell for many! Let us not discuss here the inconsistencies that disturb the harmony of the whole social system, and provide the impulse for a wide variety of proposals for the repair of society in its very foundations. On the other hand, let us remain, at least for the moment, with a dissonance that is particularly important for the life of society. It is *conflict* in the narrow sense of the word. Even the noblest of men, each of whom in himself may be a paragon of virtue, easily come into the kind of contact in which the directions of their actions cannot at all be reconciled, but instead cross one another's paths in hostility – thus the wicked collide all the more into the wicked and also the good. If the conflict were to spread too much, and man stood in the way of man, society would be threatened with universal confusion, indeed, society itself, the organic whole, would become absolutely impossible. Conflict must therefore be prevented in advance. Because of that,

certain rules are established, by which all members of society are meant to abide, thereby limiting their own power and will: thus arises the *law*. But even with the help of legal regulations (laws), society cannot completely prevent conflict. Conflict comes in many cases where either the law is interpreted differently in different quarters or where one intentionally offends against the clear and undeniable substance of the law. Thus dissonance again arises, and its complete resolution is then the task of the courts.

What applies to individuals applies also to whole societies, which feature as 'moral persons', and mainly to states and nations. We also judge their actions from the moral standpoint, either admonishing or endorsing. That is why probably even whole nations and states should accept the supreme authority of the law over themselves, and in the event of a conflict should accept the findings of its courts. Reality, however, is extremely far from that ideal. There is a considerable difference between the way individuals settle their disputes and the way large social organisms do. Amongst the former, it is a rule – so long as a voluntary reconciliation does not occur on time – that the *court* decides and both parties accept its findings. After all, even cases of violently 'taking justice into one's own hands', seeking to break free from the course of legislation and the law, end up in the courtroom. A relatively rare exception, which appears only in certain special circumstances, is the resolution of personal conflicts by means of a *duel*. Among large social organisms we find the very opposite of this. If reconciliation does not occur between states or nations, they usually reach for weapons of war, that is, enter a duel. Only here and there – and rarely in matters of great importance and seriousness – do both parties embark on a legal path and accept the arbitrating decision of an international court. That is understandable. The sacred sword of justice is unfortunately no greater in length than the secular sword of material power. Where the findings of a court cannot be carried out with a decisive result, it is up to the good will of the parties to the conflict to accept it or not. Between completely independent states the legal force of international courts therefore has its limits, and a comparison of conflicts between states and conflicts between private parties will always somehow be lame. Every step, even the very smallest, whose purpose is to expand and strengthen the sphere of the legal force of international law in any way, therefore needs to be called the more gratifying. It is surely not unknown that endeavours of this kind are being made in our day, especially in Belgium, that the first institute of international law has been set up there,⁵ and also that further practical steps in this matter have already been taken to make it a subject of parliamentary debate.

⁵ [The Institut de droit international was founded in Ghent in 1873. Its mission was to help resolve international disputes.]

By the way, it is important to avoid a certain misunderstanding here. The endeavour to have legal proceedings preferred to a duel in international conflicts is not based on a beautiful but foolish dream about the possibility of the complete disappearance of wars from the world. After all, neither the best criminal code nor the best court system can ensure that there is no more crime. But in this case it is a matter only of the aesthetic form of the *resolution of true dissonances*. And those will surely be forever used in this way by nature in its macrocosm, just as the artist uses them, and will continue to do so, in his microcosm. In other words, even if that beautiful, but for the time being very distant, ideal were made a reality, and all the civilized countries surrendered a certain part of their sovereignty and independence, transferring it to some special central international authority, that is to say, even if the whole educated world were voluntarily transformed into a kind of unified comity of nations, even then the death knell would not yet have sounded for all war. What could cease for ever are at most those wars by which an offended state demands satisfaction, because at present no other means exist, and in the best case international duels, that is, wars, which repay wrongs that have been committed, or, in other words, resolve true dissonance. Yet those wars that do wrongs, that cause dissonance, can to some extent be limited as 'international crimes', but one will never manage to eradicate them completely. Moreover, the ideal central legal authority would probably have to reach for the sword of war quite often if it wanted its just decision, as is only fitting, to be executed against the defiant wrongdoer. Natural science is very diligently and highly concerned with the question of whether it is possible to prevent war, as well as the further consideration of whether war might not only be unavoidably necessary, but also even be something that is beneficial for the whole. And the results of this research make it almost undeniable that the *struggle for life*, which in all nature and consequently also amongst the larger social units, both of animals and of people, must sometimes appear in the bloody garb of war as well, and that also in this form, despite all the actual atrocities and despite all the sad consequences, it is often very beneficial to mankind as a result of the great exertion of all its spiritual and material strengths, indeed, that in several respects it also provides abundant impulses to universal civilizing activity, which cannot be substituted for by anything else.

War would thus to the same degree as it appears as the 'scourge of nations' also be the guarantee of their permanent continuation on the road to greater perfection. The same thing is nevertheless true of the *'struggle for life' in general*, which *in modern science means roughly the same thing as what is popularly called 'evil'*. The theory of this evil, however, is an important and large part of natural science. And that fact unfortunately causes many misunderstandings and much

bitterness, and unnecessarily provokes people against science in general. People, you see, perceive in the theory of the 'struggle for life' an expression of sheer pessimism, the revealing of a bottomless chasm that swallows up all of the nobler sentiment, all enjoyment of life. And yet this fatal struggle for life, always bringing to mind the name of Darwin, always means quite the opposite. First and foremost, it has to be emphatically pointed out that science simply discovers and describes what really is, but does not praise or vilify! That is why science never claims that the universal struggle is something pleasant or noble. Science does not express its agreement with the struggle, nor does it have to bother with condemning or damning it. And if science says that the struggle *is* and always *will be*, because it *has to be*, it is not trying to say that struggle in itself, in individual cases, as a hostile, deadly conflict, is something praiseworthy, something which *ought to be*. After all, surely the natural scientist, whose probing eye penetrates ever deeper into all the ways and degrees of this struggle for life, himself senses best the harsh, stark dissonance in it, but what is he supposed to do? Should he perhaps invent some poetically and perhaps even morally valuable, but theoretically quite unfounded, unimportant reasons, or actually excuses, for these dissonances? Or should he refer to their future resolution in the other world beyond the grave, which absolutely eludes all scientific debate? Not at all! Science must keep looking, must track the truth and inquire into it, and do so quite impassively, without any thrill of aesthetic sensibility. And behold! The efforts of science are rewarded in an admirable way, to the utmost: *dissonances need not first be resolved by any invented commentary, because nature herself resolves them.* 'The world improves itself by means of the universal struggle for life.' That is the well-known proposition, which in its simplest and most modest form contains the immense progress in our outlook on the world. True, the existence of evil could never really be denied, but all the more did it become a mystery, because some kind of aesthetic instinct of man still had to suggest to him that evil actually only serves good, as dissonance serves harmony. But the earlier opinions still failed to provide us with precise proof of why, and hard evidence of how, this happens. Because the usual presentation of several selected examples in which evil appears, through unfathomable Providence, to turn into good, and opposite which at least the same number of counter-examples could be set, cannot be considered either proof or evidence. Natural science therefore now teaches us how that which is less well adapted for life and its preservation usually perishes in the struggle for life, and how the winner's abilities and advantages by means of this struggle become not merely tougher and stronger, but as a consequence of heredity further intensify and become more perfect also in the offspring. Is not this kind of view of evil, which now not only serves good but even gives birth to

it, more serious and magnificent than all others? Compared to this theory, what are all the other theories, old and new, about the 'best world', what are all the apologies of optimism? True, the benefit of the whole, whether a social system or a whole species, is very often bought at the price of the destruction of the individual. But we would surely prefer to accept that idea, if we consider that we realize, on the basis of a certain justified knowledge, and not on the basis of mere belief, that we are convinced of that progress and perfecting of the whole. Consequently, *the bloody thread of evil, with which nature seems to be shot through, all over the world plays the role of dissonance, which is resolved in an aesthetically perfect way, not with the help of some invented idea, but according to precisely known reality. There is no room for pessimism here.* Are not, however, the old opinions about some kind of artistic value of the world, about the beauty of its construction, and the ingenuity of its operation given entirely new, but profoundly important, contours? Who would not recall in particular the compassionate view of the ancient Greeks, who, if we may say so, were the most aesthetic of all nations, and called the world the *cosmos*, that is, order, harmony, and beauty, and invented the extraordinary myth about the 'harmony of the spheres'?

Translated from the Czech by Derek and Marzia Paton