

CHAPTER III
NON-MARXIAN SOCIALIST DARWINISM:
FRIEDRICH ALBERT LANGE AND LUDWIG BÜCHNER

Friedrich Albert Lange and Ludwig Büchner were not only two of the earliest advocates of Darwinian theory in Germany, but were also the first Darwinians in Germany (and Lange was probably the first anywhere) to attempt a systematic application of Darwinism to social questions. Partly because of Lange's influence on Büchner and their personal contact, the social theories they developed from Darwinism were similar. Although their ideas are often discussed under the rubric of social Darwinism, it is probably more accurate to consider their views a subset of socialist Darwinism. Though they shared with social Darwinists the belief that population pressure and the struggle for existence were ineluctable natural laws influencing humans as well as other organisms, they--unlike social Darwinists--emphasized that human reason could modify and soften the struggle for existence in human society.¹ The conclusions they drew from Darwinism for society were radically different from the ideals of laissez-faire economics, militarism, and racism that dominated social Darwinist discourse in the late nineteenth century. The opposition between Lange's position and social Darwinism was so pronounced that Bebel, when he became involved in polemics with the social Darwinian biologist Heinrich Ernst Ziegler, recommended Lange's *Arbeiterfrage* as an antidote to Ziegler's attempt to disprove socialism on the basis of Darwinism.² Lange and Büchner demonstrated that the left was just as zealous as liberals and conservatives in appropriating Darwinism in defense of their political and social views.

The socialism of Lange and Büchner was decidedly non-Marxian and non-revolutionary and retained enough vestiges of liberalism that Franz Mehring would dispute that Lange was a socialist at all, while another scholar has called their views

"bourgeois socialism."³ However, although neither joined the German Social Democratic Party, both considered themselves socialists and ardently worked to further the German labor movement. Büchner wrote to the editor of a socialist newspaper that the worker "must not merely be a friend and defender of his class (*Stand*), he must at the same time be a socialist."⁴ In 1863 Büchner founded a workers' educational association in Darmstadt, while Lange established a consumer cooperative in Duisburg about the same time. Both participated in the left wing of the League of German Workers' Societies, and Lange was elected to the standing committee, where he became a friend and colleague of August Bebel. Lange and Büchner both joined the International Working Men's Association (First International) in 1866 and attended its Lausanne Congress in September 1867.⁵

Another reason that Lange's and Büchner's fusion of Darwinism and social theory should be considered socialist Darwinism is that their position in the socialist movement in Germany warrants it. Lange esteemed Marx and Engels highly and wrote to Engels in 1865 with the hope that closer ties might develop between him and them. Marx and Engels had nothing but contempt for Lange and his views, and they levelled caustic criticism at him and Büchner in their correspondence. Socialists in Germany, however, generally respected Lange and Büchner more highly. Bebel in his memoirs expressed admiration for Lange and considered him an ally in the League of German Workers' Societies standing committee, since he continually pressed the organization toward the left.⁶ In a letter to Lange's biographer, Bebel wrote that he had "seldom known a more sympathetic person than him, a man, on whose forehead is written honesty, uprightness, and openness."⁷ Many other socialists, including Bebel, Eduard Bernstein, and Wilhelm Liebknecht, spoke highly of Lange's *Arbeiterfrage*, while the *Sozialdemokrat*, the official organ of the socialist party during the period of the Anti-Socialist Law, consistently promoted it as a book of interest to socialists.⁸ Even Franz Mehring, who questioned Lange's credentials as a socialist, wrote an introduction to a new edition of *Arbeiterfrage* (1910), in which he noted the important role Lange and his book had played in the German labor

movement.⁹ Büchner was likewise admired by many socialists and wrote numerous articles for the socialist press, including essays in *Die neue Zeit* and *Die neue Welt*.

Lange's Malthusian Socialism

Lange is best known today as an early leader of the neo-Kantian movement, who authored *Geschichte des Materialismus* (1866, translated as *The History of Materialism*), a work critical of then-popular scientific materialism. This book earned him a professorship in philosophy, first at Zurich in 1870 and later at Marburg, where he remained until his death in 1875. Prior to his professorial career, he had been a *Privatdozent* at the University of Bonn, a *Gymnasium* teacher in Duisburg, and finally a journalist in Duisburg and Switzerland. Lange's neo-Kantianism was grounded in his epistemological skepticism of any form of metaphysics, whether idealistic or materialistic. The political reaction of the 1850s had created a climate favorable to the rise of neo-Kantianism in academic philosophy, since it cast suspicion on materialism, left Hegelianism, and Schopenhauerian pessimism, which henceforth were consigned to roles outside the academy (popular though they were). Early neo-Kantianism, while maintaining a dualism between the mechanistic phenomenal world and the idealistic world of practical affairs (noumenal realm), leaned heavily toward positivism and empiricism. Lange was no exception, declaring in 1858, "My logic is calculus of probabilities, my ethics are moral statistics, my psychology rests on physiology; in a word, I try to operate only within the exact sciences."¹⁰

While opposing the materialism of Büchner, Karl Vogt, and Jakob Moleschott, Lange embraced with alacrity Darwin's theory of evolution in the 1860s and also read Darwin's *Descent* soon after its publication.¹¹ Lange combined his interests in Darwinian science and social questions to produce *Die Arbeiterfrage* (1865, *The Labor Question*), the first book to develop a systematic social theory based on Darwinism. Thus six years before Darwin published *Descent*, Lange was already applying the struggle for existence to humans. It was also one of the earlier books in Germany promoting Darwinian theory in general, which had not received widespread attention there until 1862-63. He also corresponded with Ernst Haeckel and appreciated his biological writings.¹² Unlike most leading Darwinists in

nineteenth-century Germany--including Büchner, Haeckel, and most socialists--Lange did not see Darwinism as a scientific confirmation of materialism, nor did he emphasize the anti-religious implications of Darwinism.

Not only was Lange proficient in the fields of pedagogy and philosophy and an avid follower of developments in natural science, but he also stayed abreast of political and social issues. In September 1864 he attended the annual meeting of the Association of German Scientists and Physicians in Giessen, where he met Büchner for the first time. Though Lange opposed Büchner's philosophical materialism and publicly criticized him in *The History of Materialism*, they agreed to be comrades in the struggle for social justice.¹³ His involvement in the labor movement in the early and mid-1860s immersed him in social issues. In 1865-66 he founded and edited a small newspaper, *Der Bote vom Niederrhein*, to promulgate his political and social views. One of the purposes of his paper was to foster a labor movement independent of the bourgeoisie and to advance the cause of democracy.¹⁴

Unlike Marx and Engels, who were ambivalent in their attitude toward Darwin and thoroughly rejected Malthusian theory, Lange wholeheartedly endorsed Darwinian theory and a slightly modified version of the Malthusian population principle. While rejecting as too inflexible Malthus' formula that food production tends to increase in an arithmetical progression, he nevertheless retained the core idea of Malthus: "The truth of the Malthusian theory consists therefore in this, that the growth of population constantly reaches the limit that the growth of the means of subsistence permits."¹⁵ By considering the tendency toward overpopulation a natural law affecting all organisms, including humans, Lange placed the population problem at center stage. In *Arbeiterfrage* he claimed, "*The fact is, that the relationship of the production of the means of subsistence to the movement of the population comprises the most important of all social problems.*"¹⁶ In another book on social issues he wrote, "The law of population is the alpha and omega of the social question. . . . Only with the knowledge of the law of population and its effects does one begin to understand the miserable social conditions and their source . . ." ¹⁷

It is unclear whether or not Lange converted to Malthus' population theory as a result of studying Darwinian theory or whether he had already embraced Malthusianism from other sources. However, Lange definitely considered Darwinism a legitimation for Malthus' ideas, and he presented the human struggle for existence as a necessary consequence of population pressure.¹⁸ Indeed the first chapter of *Arbeiterfrage* is entitled "Der Kampf um das Dasein" ("The Struggle for Existence"), and Lange discussed the struggle for existence before he ever broached the subject of Malthus' theory.

From the beginning of his book, Lange explained that the struggle for existence applies not only to plants and animals, but also to humans. He argued that the human race is subject to entirely the same laws as other organic beings; that also in it [the human race] lack and misery place a limit on natural multiplication, that the stronger tribe suppresses the weaker, or that wars and revolutions from time to time must decimate entire peoples, so that a period of happy expansion can again follow.¹⁹

He considered the struggle for existence a constant in human history that contributed to the progress of humanity both biologically and socially, because it brought about the destruction of the weaker tribe by the stronger and the less intelligent by the more intelligent.²⁰ However ineluctable and inevitable it may be, however, he did not think that the struggle manifested itself in the same way in every period of history. He offered a brief sketch depicting the various forms the struggle for existence had taken in different historical eras. Among the most primitive peoples, he surprisingly argued--contra his own Malthusian views--that not lack of subsistence, but predatory animals kept the human population in check. Only as humans acquired fire and tools could they defend themselves sufficiently against animals to begin spreading out and fighting among themselves for the best lands. A later manifestation of the human struggle for existence is what Lange termed the racial struggle, which he equated with European imperialism and the extinction of less developed peoples.²¹

When Lange turned his attention from history to an analysis of contemporary society, he again saw the struggle for existence in operation. He maintained "that the

distress of workers at present is nothing other than *the form of the universal struggle for existence corresponding to contemporary economic relationships*."²² He attributed this new phase of the struggle for existence to the separation of work from the soil, allowing capital to exploit labor through treating products as commodities. "The struggle for existence emerges through this into the form of a struggle for wages," and Ricardo's law of wages--that wages tend to sink to a subsistence level through the law of supply and demand--is only an expression of a special case of the Darwinian law.²³

The foregoing description of Lange's social philosophy seems to differ little from the fundamentals of social Darwinism. However, Lange's neo-Kantian perspective and his ethical outlook rescued him from the fatalism of which he has sometimes been accused.²⁴ The reason his application of Darwinian theory could produce such different results from the social outlook of Haeckel and other social Darwinists was that Lange's idealism stood in opposition to his naturalism. This was not at all an inconsistency in Lange's social philosophy, but was a conscious move on his part. Klaus Christian Köhnke has noted that Lange's goal involved "strictly segregating the world of exact inquiry from that of ethical convictions, that of science from that of *Weltanschauungen*."²⁵ Natural laws, such as Malthusianism and Darwinism, were inescapable, even for humans, but human reason and ideas could mitigate their effects. The natural laws merely explained the problem and set forth the framework within which the solution could be discovered. They restricted the playing field, but did not determine what human society should be like. The solution to social problems would come in conjunction with "a complete change in the mental life of the peoples."²⁶ For Lange Darwinism was thus by no means a source of ethics or prescriptions for society, but rather stated a problem that required the application of human reason to overcome. Thus the social program he promoted had little or nothing to do with Darwinism, which receded into the background whenever he moved from theory to praxis.

The ultimate inevitability of the struggle for existence did not imply to Lange that we must simply learn to live in harmony with this natural law. Indeed, Lange

believed that the destiny of humanity was to oppose this natural law and to suppress it to as great an extent as possible. He explained,

In our present writing on the labor question Darwin plays a large role, insofar as we have attempted to derive the conditions which produce the labor question from the principles developed by Darwin, without, however, viewing them as absolutely necessary ingredients of human existence.²⁷

The reason they are not necessary in the human realm, Lange continued, is because humans can to a certain extent lift themselves above natural laws through purposeful action.

While often emphasizing the continuity between humanity and the rest of the organic world and stressing the applicability of the laws of nature to humans, at times he noted the distinction between humans and other species, which allows people to exercise an element of control over nature unknown to other organisms. Lange reminded his readers that in considering the social question, it is always important to remember the

struggle against the struggle for existence, which is identical with the higher mental constitution of the human. This struggle may in truth be an unending process; but it has its finite goals, its peace treaties and victory celebrations.²⁸

In numerous passages of his works, Lange placed human reason in opposition to natural laws and nowhere is this more apparent than in his treatment of the Malthusian population principle and the concomitant struggle for existence. In sharp contrast to nature, where profligacy and the subsequent destruction of myriads of organic beings rule the day, "Human reason knows no other ideal than the greatest possible preservation and perfection of life, which has once begun, together with the limitation of birth and death."²⁹ Lange indicated that although humans are eternally subject to the tendency to multiply beyond the means of subsistence, they can take countervailing measures and obviate the social misery produced by the unfettered exercise of this law. Noting that we can control the distribution of cultivated plants

and animals, he asked rhetorically why we could not control the propagation of our own species.³⁰ It is human ethical ideals that provide the impetus for humans to escape the laws of nature to whatever extent possible. Lange distinguished humans from other organisms, because humans cannot look indifferently on suffering and know in advance the fear of destruction. He stated,

We desire for the human a different nature than the nature of animals, and the entire great struggling and striving of humanity has as its purpose to produce a condition in which the living, enjoying its being, lives a full life in the greatest possible perfection, and falls victim neither to a sudden destruction, nor to the slowly gnawing tooth of misery.³¹

Lange's insistence that human ethical concerns take priority over natural laws led him to dispute the social Darwinist emphasis on the necessity of social inequality. He claimed that human justice and reason were contrary to the animal nature of humans and could restrict the influence of the natural law of differentiation so important in the operation of natural selection:

This natural law is present and will strive in every stage of human development and under all circumstances to exert itself; only its effects will be partially modified, partially absolutely abolished and through opposing effects suppressed by virtue of another natural law, which from the sympathetic living together of humans causes the ideas of equality and solidarity in progress to grow.³²

Lange admitted that human sympathy, "the most beautiful blossom of the earthly organisms," was only manifested in small measure in contemporary society, but he held forth the hope that it would come to dominate social relations one day.³³

Why this transition would occur he did not say, nor was he optimistic that it could be introduced suddenly through revolutionary activity. Lange's social theory--like Darwin's biological theory--was gradualist:

Centuries may pass before the struggle for existence is transformed into a peaceful living together of the peoples of the earth; but the

turning point of the times, the *victory of the good will for the improvement of our conditions* cannot lie in the all-too-distant future.

Certainly this victory will never be a perfect one.³⁴

Natural laws could never be entirely circumvented, but they could be brought under a substantial measure of control in accordance with human ethical ideals by the application of reason. In the final paragraph of *The History of Materialism* Lange also expressed his belief that a new age would dawn under the banner of a great idea and brotherhood or community would supplant egotism in economic relations.³⁵

It is surprising that Lange did not think through and elaborate a comprehensive solution to the population problem. Clearly he opposed compulsory restrictions on marriage or child-bearing--which he mistakenly thought was Malthus' position--as inimical to personal freedom. In the first edition of *Arbeiterfrage* and in an 1866 article he opposed any restriction on human propagation, including voluntary abstinence, as unnatural and ineffective.³⁶ However, when he later discussed John Stuart Mill's proposals to solve the problem of overpopulation, he seemed to agree with Mill that voluntary self-control in child-bearing coupled with some government encouragement could ameliorate the problem.³⁷

In *Arbeiterfrage* Lange amazingly circumvented all discussion of concrete steps to solve the imbalance between population growth and the food supply. In the conclusion to the first edition, he provided six suggestions for solving the labor question. The first five concerned the organization and education of workers and civil liberties. The sixth point was not a real suggestion at all, but merely stated, "Only after the attainment of these foundations [i.e., the first five points] . . . can we think about exalting humanity with consciousness and rest to a position in which the struggle for existence loses its terror."³⁸ Thus Lange relegated to the future any attempt to solve the population problem. The solutions he offered were only preliminary to more comprehensive ones. This accords with his view stated elsewhere that the real solution to the Malthusian equation was to increase the production of food, a task requiring a complete restructuring of society. Lange--contra Darwin and

most Darwinians--thought the increase in the food supply would lead to a decrease in the size of families, though he never specified how or why this would occur.³⁹

According to Lange, in addition to competition for the means of subsistence, the struggle for existence manifests itself in another way in human society--the "struggle for privileged position." This form of struggle among humans operates in the same manner as the biological struggle for existence. It has contributed to social progress and simultaneously become milder and less brutal. Just as in the struggle for existence, many potentialities are destroyed and most people never perform at the level of their ability. This negation of human perfection is anathema to Lange and he sees it as grounds for creating greater equality in society. Although he did not believe the struggle for privileged position could ever be entirely removed and therefore believed that some inequality in society would persist, he nevertheless pressed for the elimination of class divisions by the elimination of capitalist accumulation.⁴⁰

Lange's Malthusianism and his insistence on the inevitability of the human struggle for existence found little resonance among socialist thinkers in the nineteenth century, despite Kautsky's transitory flirtation with it before he embraced Marxism. What impressed most socialists about Lange was his sympathy toward socialism and his social program promoting workers' organizations, education, and democracy. None of these were derived in any way from Darwinism. However, Lange's attempt to ground his social theory in Darwinism paradoxically lent the aura of scientific authority to his prescriptions for society, even to those who rejected the aspects of his theory that actually were derived from Darwinian theory.

Büchner's Reform Socialism and Darwinism

Four years before Darwin's *Origin* appeared, Büchner published his sensational work promoting scientific materialism, *Kraft und Stoff* (1855, translated as *Force and Matter*), which went through twelve editions in its first seventeen years. As a young medical doctor, he had been appointed to a clinical position with teaching privileges at the University of Tübingen in 1852, but the notoriety he acquired through his book torpedoed his promising career. Materialism was anathema to the

governments of the German states, and it was not tolerated in the universities. Therefore Büchner's bold philosophical stance cost him his job, whereupon he returned to Darmstadt, his home town, to set up a private medical practice and continue writing. He was one of the most important popularizers of Darwinism and materialism in late nineteenth-century Germany.⁴¹

Büchner was just as zealous as Lange to incorporate biological evolution into social thought, and he applied it in a similar manner. He believed that Darwinism would revolutionize not only biology, but all fields of human knowledge. He wrote to Hermann Schaffhausen, the anthropologist who discovered the Neanderthal fossils:

As the new conception of nature [i.e., Darwinism] gradually prevails, so with it is produced, as I believe, one of the greatest transformations and one of the greatest advances, which human knowledge has ever undergone . . . At the same time a clarity and simplicity never before suspected will enter our entire philosophy.⁴²

Indeed, Büchner functioned as a forerunner for Darwin in Germany and contributed heavily to the intellectual transformation he described to Schaffhausen, both before and after Darwin published his theory.

In his attempt to explain all facets of the cosmos in materialistic terms in *Kraft und Stoff*, Büchner proposed a theory of the transmutation of species without knowledge of Darwin's ideas. Since it was only one topic among many in his book, Büchner did not provide much empirical evidence to support his theory of transmutation, and thus it remained sketchy. His theory did not resemble Darwin's, since he explained speciation as the direct result of environmental changes. He believed that in times of geological stability (such as the present era) speciation is gradual and imperceptible, but in periods of geological upheaval, speciation would proceed more rapidly.⁴³ When Darwin published his theory, Büchner accepted with alacrity the concepts of natural selection and the struggle for existence, though he continued to uphold the significance of environmental factors to a far greater extent than Darwin.⁴⁴ Nevertheless, he considered competition within species important and would later stress this principle when discussing human society.

Büchner, who had earlier encouraged Lange to apply natural science to philosophy, was enthused with Lange's *Arbeiterfrage* and wrote an extended review to publicize it.⁴⁵ He found the book congenial because it upheld an independent position between Ferdinand Lassalle's call for state-sponsored socialism and Hermann Schultze-Delitzsch's self-help measures, and he was also attracted by Lange's application of the struggle for existence to human society. Büchner agreed with Lange that natural laws could never be banished from human society, though their effects could be mitigated to some extent:

In fact it seems to us certain, *that the struggle for existence rests on a natural law, which as such can never be annulled, . . .* Thus this struggle can certainly take on various forms and relationships, but never as such disappear; and mutual striving and struggles for the goods of life is and will remain a necessary element of the life of the human race under *every* form of state and society. Also it would hardly be desirable, that it might be otherwise; for all progress of the human race in the material and mental realms, yes, interest in life itself, rests more or less on these struggles.⁴⁶

Büchner also agreed with Lange's Malthusian position, which formed the basis for their common conviction that the struggle for existence would never be entirely eliminated in human society.⁴⁷

The greatest lack in Lange's *Arbeiterfrage*, according to Büchner, was that the solutions he offered, though ameliorative, were insufficient. He charged Lange with neglecting a crucial question: "Do humans fight the struggle for existence with *equal* or with *unequal* means?" For the remainder of his life Büchner proposed social reforms, some of them far-reaching, to sweep away political and social inequalities, so that everyone would enjoy equal opportunities in the struggle for existence. Physical and mental talents and abilities--i.e., natural biological inequalities--should determine who rises politically and socially, and competition would promote this kind of natural selection. Büchner's conception of equality harked back to the natural rights philosophies of the Enlightenment and to the subsequent call for *carrières*

ouvertes aux talents (careers open to talent). The specific means Büchner proposed in 1865 to cure social inequality was to gradually restrict or eliminate inheritance.⁴⁸

Büchner unveiled his political agenda in greater detail and to a wider audience in 1870 in *Der Mensch und seine Stellung in der Natur in Vergangenheit, Gegenwart und Zukunft* (*Man and His Place in Nature in the Past, Present and Future*). As the title suggests, Büchner was trying to apply principles derived from nature to humans. He did this primarily by comparing society to an organism, in which "every single cell or each group of cells has its own autonomy and yet through its activity contributes its full share to the preservation of the whole." This proved to his satisfaction that the division of labor is beneficial and works for the good of all in society. However, when it came to applying the struggle for existence to human society, Büchner argued that humans did not have to meekly submit to natural law, but could exercise a measure of control over the struggle for existence through the use of reason.⁴⁹

Reason, though, is a malleable term, so we must enquire what Büchner considered rational. Indeed his conception of how humans should use the power of reason to intervene in the struggle for existence seems contradictory, because instead of mitigating or sweeping aside the human struggle, his suggestions were calculated--as he himself admitted--to intensify human competition. He advocated a levelling of society, so that competition could be more equal and would depend on nothing other than the talents and abilities of each individual. In addition to reforming inheritance rights, which he had proposed earlier, he called for the abolition of ground rent and the communal ownership of land to create the necessary economic and social levelling.⁵⁰ Therefore it seems that instead of replacing the power of nature with the power of reason, as he claimed to be doing, he was actually trying to use reason to bring society more fully into submission to the dictates of nature and the struggle for existence.

In the 1860s and 1870s Büchner was a warm friend of the fledgling and diffuse socialist movement. He did not hesitate to promote radical political views in his writings on Darwinism and natural science. In *Der Mensch und seine Stellung* he overtly rejected monarchism and all hierarchical political structures in favor of

egalitarian republicanism, though he did not espouse the complete abolition of private property and capital; all should be allowed to acquire goods according to their own abilities through their own labor.⁵¹ In 1876 he published an article in the socialist press as well as a book depicting the societies of social insects as models of rationality, equity, and freedom. According to Büchner, ants--the most intelligent of the social insects--form "socialist republics," while bees live in a "communist or social democratic monarchy." Büchner called on workers to imitate the ants and bees.⁵²

By the time Büchner wrote *Darwinismus und Sozialismus* in 1894, his relationship to the socialist movement had altered considerably. Although he had not substantially altered his political position, he now tried to distance himself from the socialist party as much as possible. After 1878 the SPD had shifted increasingly toward revolutionary Marxism, incorporating it into their official platform in 1891. Büchner, however, completely rejected revolutionary socialism and stressed that his reforms must be introduced peacefully.⁵³ Gradualism had long been a leading idea in Büchner's socialism, and in 1863 he wrote to Lassalle,

In any case it may be rather boring for those with an impatient disposition--but history only moves with lead feet. We can at most give it a jab in the ribs sometimes, but cannot force it to make a leap.⁵⁴

However, in 1894 he also lashed out against Lassallean socialism, which he had always considered inadequate.⁵⁵ He still upheld the radical political program he had promoted earlier (restricting or eliminating inheritance and common ownership of land) and even added another proposal to it in 1894: the transformation of the state into an insurance society to protect all citizens financially against sickness, old age, accidents, and death.⁵⁶ This was an extension of the social insurance programs that Bismarck had already implemented in Germany in the 1880s.

Darwinismus und Sozialismus was not only directed against revolutionary socialism, but also against the anti-socialist rhetoric of prominent Darwinists. In 1878 Büchner had written Haeckel expressing disapproval of his anti-socialist stance in *Freie Wissenschaft*.⁵⁷ Büchner explained that social institutions often permitted the victory of the worst instead of the best in the human struggle for existence and that

it is the proper task of humans to artificially shape the struggle for existence.⁵⁸ In *Darwinismus und Sozialismus* he advocated the "replacement of the power of nature by the power of reason, i.e. the greatest possible equalization of the means and circumstances, under which and with which people fight." He believed that the individual struggle for existence must be supplanted by a collective struggle.⁵⁹ To the end of his life, Büchner advocated radical policies to alleviate social misery and inequality. He called for "the greatest possible equalization of the means and conditions, with which and under which every individual fights his struggle for existence or carries out his competition for the goods of life." The means to bring about this equality must be peaceful and must benefit all of society, not just one class or segment. Büchner criticized the SPD for violating these two principles.⁶⁰

The chasm between Büchner's thought and that of most socialists was especially apparent in his 1893 review of Alexander Tille's *Volksdienst*, a book published anonymously by a "social aristocrat." Tille, in his fusion of Darwin and Nietzsche, was radically anti-socialist and advocated an aristocracy of talent, which would rise through its success in untrammelled competition under equal conditions. Tille's philosophy appealed to Büchner, who was suspicious of rule by the masses and asserted:

Nevertheless this contest or rivalry or . . . competition is the actual driving impulse in the evolution of humans and humanity; and everything that tries to stop or restrict this free competition, must necessarily halt progress.⁶¹

Büchner's fundamental agreement with Tille and antipathy for the SPD program demonstrate that Büchner's socialism--though radical in its proposals--remained embedded in the liberal paradigm of a competitive society.

Conclusion

Lange's and Büchner's form of socialist Darwinism differed considerably from Marxist conceptions. They did not maintain as strict a separation between natural and social laws as did Marx and Engels and were not as optimistic that natural laws could

be transcended. Further, they considered the Malthusian population principle an immutable natural law, while Marx and Engels viewed it as a transitory social law resting on present non-socialist modes of production. Their socialist Darwinism was far more Darwinian in content than Marx and Engels, who sought to eliminate the struggle for existence in human society. Lange and Büchner simply wanted to mollify it while retaining economic competition.

However, while admitting that humanity could never entirely escape the struggle for existence, they did not succumb to the social Darwinist idea that humans should therefore meekly submit to the dictates of nature and accept inequality, poverty, and misery. They believed that humans could achieve a measure of independence from natural laws by the exercise of reason and moral ideals, and for them reason militated toward reform socialism. Their socialist Darwinism illustrates that Darwinism could be integrated into social theory in quite divergent ways and did not necessarily entail the inegalitarian social philosophies of social Darwinists. However, their application of Darwinism to society, while influential in the socialist movement, never won many adherents among intellectuals. Socialist intellectuals gravitated toward Marxism in the late nineteenth century, and Darwinian biologists and sociologists often used Darwinism to oppose socialism.

ENDNOTES

1. Peter Weingart, Jürgen Kroll, and Kurt Bayertz, *Rasse, Blut und Gene. Geschichte der Eugenik und Rassenhygiene in Deutschland* (Frankfurt, 1988), 116-17.
2. August Bebel, *Die Frau und der Sozialismus*, 25th ed. (Stuttgart, 1895), xiv.
3. Franz Mehring, "Einleitung," in Friedrich Albert Lange, *Die Arbeiterfrage* (Berlin, 1910), 5; Samuel Lee, "Der bürgerliche Sozialismus von Ludwig Büchner. Eine Ideologie zwischen der bürgerlichen Demokratie und der sozialistischen Arbeiterbewegung," (diss., University of Göttingen, 1976), 12, 162-63.
4. Büchner to Johann Phillip Becker, 28 August 1866, IISH, Becker papers, D 324.
5. Lee, "Der bürgerliche Sozialismus," 8-12, 162-63.
6. August Bebel, *Aus meinem Leben*, in *Ausgewählte Reden und Schriften*, ed. Rolf Dlubek and Ursula Herrmann (Berlin, 1983), 6:77.
7. Bebel to Ellissen, 11 November and 16 December 1889, Archiv der

Massenbewegungen und Parteien der DDR, Bebel papers.

8. Wilhelm Liebknecht to August Geib, 5 December 1872, in Wilhelm Liebknecht, *Briefwechsel mit deutschen Sozialdemokraten*, ed. Georg Eckart (Assen, 1973), 1:447; W. Liebknecht to F. A. Lange, 25 January 1871, in W. Liebknecht, *Briefwechsel*, 1:375; Eduard Bernstein, "Eine neue 'Arbeiterfrage,'" *Die neue Zeit* 12,2 (1893-94): 583.

9. Mehring, "Einleitung," 5. For more on Lange's influence on prominent socialists, see the chapters on Bebel, Kautsky, and Bernstein.

10. Köhnke, *Rise*, 95-96, quote at 151. For a good overview of Lange, see Willey, *Back to Kant*, ch. 4; Köhnke, *Rise*, 151-67; and Hans-Ludwig Ollig, *Der Neukantianismus* (Stuttgart, 1979), 15-21.

11. Lange to Theodor Piderit, 17 August 1871, in Lange, *Über Politik und Philosophie. Briefe und Leitartikel 1862 bis 1875*, ed. Georg Eckert (Duisburg, 1968), 291.

12. F. A. Lange to Haeckel, 15 October 1873 and 12 October 1874, Haeckel Haus, Best. A, Abt. 1, Nr. 2308/1-9.

13. O. A. Ellissen, *Friedrich Albert Lange. Eine Lebensbeschreibung* (Leipzig, 1894), 135; Peter Irmer, "Friedrich A. Lange--ein politische Agitator in der deutschen Arbeiterbewegung," in *Friedrich Albert Lange. Leben und Werk*, ed. J. H. Knoll and J. H. Schoeps (Duisburg, 1975), 7.

14. Georg Eckert, "Einleitung," in *Der Bote vom Niederrhein. Faksimile-Nachdruck der Jahrgänge 1865/66* (Duisburg, 1968), vii.

15. Lange, *Die Arbeiterfrage in ihrer Bedeutung für Gegenwart und Zukunft*, 1st ed. (Duisburg, 1865; rpt., 1975), 31.

16. *Ibid.*, 43 (emphasis in original).

17. Lange, *J. St. Mill's Ansichten über die sociale Frage und die angebliche Umwälzung der Socialwissenschaft durch Carey* (Duisburg, 1866), 209.

18. Lange, *Die Arbeiterfrage. Ihre Bedeutung für Gegenwart und Zukunft*, 2nd ed. (Winterthur, 1870), 13, 35n.

19. Lange, *Arbeiterfrage*, 1st ed., 11-12.

20. Lange, *J. St. Mill's Ansichten*, 209.

21. Lange, *Arbeiterfrage*, 1st ed., 13-14.

22. *Ibid.*, 54-55.

23. *Ibid.*, 2nd ed., 11-13; 1st ed., 54-55.

24. This accusation is made by Peter Emil Becker, *Sozialdarwinismus, Rassismus, Antisemitismus und Völkischer Gedanke. Wege ins Dritte Reich* (Stuttgart, 1990), 2:392.

25. Köhnke, *Rise*, 164-65.

26. Lange, *Arbeiterfrage*, 1st ed., 163.

27. *Ibid.*, 30-31n.

28. Lange, *Arbeiterfrage*, 2nd ed., 368.

29. Lange, *Geschichte des Materialismus und Kritik seiner Bedeutung in der Gegenwart* (Iserlohn, 1866), 403-4.

30. Lange, *Arbeiterfrage*, 1st ed., 23-24.

31. Ibid, 12-13.
32. Ibid, 2nd ed., 68-69.
33. Lange, *Geschichte des Materialismus*, 404.
34. Lange, *Arbeiterfrage*, 1st ed., 170.
35. Lange, *Geschichte des Materialismus*, 557.
36. Lange, *Arbeiterfrage*, 1st ed., 24; "Sociales," *Der Bote vom Niederrhein*, 17 (19 February 1866).
37. Lange, *J. St. Mill's Ansichten*, 110-12.
38. Lange, *Arbeiterfrage*, 1st ed., 164-66.
39. Lange, "Sociales."
40. Lange, *Arbeiterfrage*, 1st ed., 56-57, 61; 2nd ed., 62-63.
41. For background on Büchner, see Gregory, *Scientific Materialism*, ch. 5.
42. Ludwig Büchner to Hermann Schaffhausen, 11 July 1863, University of Bonn Library, S 2620a.
43. Büchner, *Kraft und Stoff*, 3rd ed. (Frankfurt, 1856), 79.
44. Gregory, *Scientific Materialism*, 182-83; Ludwig Büchner, *Die Macht der Vererbung und Ihr Einfluss auf den moralischen und geistigen Fortschritt der Menschheit* (Leipzig, 1882), 25-26, 41.
45. Büchner to F. A. Lange, 15 April 1858, in Lange, *Über Politik*, 44-45.
46. Büchner, "Zur Arbeiterfrage," *Deutsches Wochenblatt* (9 April 1865); rpt. in Lange, *Über Politik*, 55; see also 47-48.
47. Ibid, 49.
48. Ibid, 54-57; quote at 54-55.
49. Büchner, *Der Mensch und seine Stellung in der Natur in Vergangenheit, Gegenwart und Zukunft*, 2nd ed. (Leipzig, 1872), 187, 198.
50. Ibid, 198, 201, 208-9.
51. Ibid, 184, 201, 208-9.
52. Büchner, *Aus dem Geistesleben der Thiere oder Staaten und Thaten der Kleinen* (Berlin, 1876), 52-53, 208, 267-68, 282-84; "Sozialdemokratie und Arbeiterleben in der Thierwelt," *Die neue Welt* 1 (1876): 93; see also "Die Ameisenstadt in Pennsylvania," *Die neue Welt* 6 (1881): 6-7.
53. Büchner, *Darwinismus und Sozialismus oder Der Kampf um das Dasein und die moderne Gesellschaft* (Leipzig, 1894), 47; *Fremdes und Eignes aus dem geistigen Leben der Gegenwart*, 2nd ed. (Leipzig, 1890), 197, 242-51; *Am Sterbelager des Jahrhunderts. Blicke eines freien Denkers aus der Zeit in die Zeit* (Giessen, 1898), 297.
54. Büchner to Lassalle, 18 April 1863, in *Ferdinand Lassalle. Nachgelassene Briefe und Schriften*, ed. Gustav Mayer (Stuttgart and Berlin, 1925), 5:140.
55. Büchner, *Meine Begegnung mit Ferdinand Lassalle. Ein Beitrag zur Geschichte der sozialdemokratischen Bewegung in Deutschland* (Berlin, 1894).
56. Büchner, *Darwinismus und Sozialismus*, 22-23; see also *Fremdes und Eignes*, 226-30; *Am Sterbelager*, 251, 283.
57. On Haeckel's position, see ch. 4.
58. Büchner to Haeckel, 21 October 1878, Ernst-Haeckel-Haus, Best. A, Abt.

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59. Büchner, *Darwinismus und Sozialismus*, 17-18; *Am Sterbelager*, 231-34.

60. Büchner, *Die soziale Frage* (Berlin, 1899), 6-7.

61. Büchner, "Sozialdemokratie und Sozialaristokratie," in *Im Dienste der Wahrheit. Ausgewählte Aufsätze aus Natur und Wissenschaft* (Giessen, 1900), 92.