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Formulating an Anarchist Sociology

Peter Kropotkin's Reading of Herbert Spencer

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much of merit in Spencer's politics, the real significance of Kropotkin's engagement with Spencer's political writing was in how it clarified the distinctiveness of anarchist communism as a tradition of political thinking. Of particular importance was Kropotkin's interpretation of individualist anarchism as an intellectual sibling of Spencerism. While the individualists disputed this relationship, Kropotkin believed that both Spencer and Tucker, in the guise of demolishing the state, reconstituted its worst features by failing to evade capitalistic values. Spencer was therefore again at the heart of Kropotkin's efforts to formulate an anarchist sociology: this time not as a scholarly model to emulate, but as a political philosopher who failed to recognize the audacity of the change required. Concluding his final article on Spencer, Kropotkin suggested that while "we cannot accept all" that Spencer had to say, he had "immeasurably contributed to the Anarchist character of the philosophy of the century ... we have entered."111 For Kropotkin, Spencer was not dead.

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¹¹¹ Kropotkin, "Herbert Spencer [VII]," 35.73

but his was a particular interpretation that reflected contemporary arguments in the biological sciences. His attempt to rescue Darwinism from proponents of an aggressive individualism is well documented, but the articles Kropotkin contributed to *The* Nineteenth Century and After exploring the disagreements between neo-Lamarckians and neo-Darwinists have received less attention. Along with showing that he maintained a commitment to Lamarckian ideas that he accurately discerned as also being important to Darwin's own work, these articles demonstrate that Kropotkin used Spencer's evolutionary theory to map a path through contemporary debates on species' adaptability. In his confrontations with Weismann, Kropotkin found Spencer's own dissection of the German's biological theory an instructive guide. For Kropotkin, one of Darwin's key contributions had been demolishing the notion of fixity in species. The kind of direct adaptation championed by Lamarck was further evidence of the essential malleability of nature for Kropotkin, and a further echo of the overarching ontology of change at the heart of his system. Kropotkin was therefore a characteristic Victorian social thinker in allying his politics to the vogue biological sciences, but this rested on a deeper engagement with this research than most exhibited.

Spencer was a thinker seduced by the pliability of organic metaphors. But whereas his organicism possessed a "conservative twist," since viewing society as a "product of evolutionary growth" invalidated human attempts to reorder it, Kropotkin's politics rested on the assumption that this reordering was a pressing necessity. ¹⁰⁹ In Kropotkin's schema, the state was essentially parasitical, draining the vitality of the social organism throughout history, and existing in a fundamentally antagonistic relationship with it. ¹¹⁰ It was in the political realm, then, that Kropotkin and Spencer diverged. Although he saw

¹⁰⁹ Jones, Victorian Political Thought, 76, 78.

¹¹⁰ For a classic statement of this, see Kropotkin, *The State*.

ualism then in the ascendency in anarchist circles.¹⁰⁷ More than this, though, it presented Kropotkin with the opportunity to articulate a competing anarchist communist vision of social relations that challenged the insidious values fostered by capitalism, apparently left uncontested by other radical thinkers.

Conclusion

Herbert Spencer cast a long shadow over British intellectual life in the nineteenth century. For this reason alone, Kropotkin's efforts to deal with his voluminous contributions to social science were necessary as he sought to demonstrate that anarchism was a viable political tradition with lessons applicable to the labor struggles in Britain. The relationship between Kropotkin and Spencer was deeper than this, however. Kropotkin's reading of Spencer's methodological writing had a profound impact on his determination to place anarchism on a sound epistemological footing. Additionally, while adopting his methodological precepts, Kropotkin was inspired by Spencer's vision of the essential heterogeneity of matter, and, correspondingly, the increasing complexity of society. Kropotkin made this the corner-stone of his ontology, an all-encompassing interpretation of phenomena that underpinned his commitment to the decentering tendencies of anarchism. Social stability, in his view, was the product of complexity and the result of the temporary equalization of forces perpetually in conflict: like the "infinitely tiny bodies that dash through space ... with giddy swiftness," but amount to "harmony" in "their whole." ¹⁰⁸

Similarly influential was Kropotkin's reading of Spencer's work on evolution. Kropotkin was a faithful disciple of Darwin,

In his memoirs, Peter Kropotkin reflected on the occasional perils of ordering tea in Scotland. "I had learned English in Russia," he wrote:

And ... had translated ... Herbert Spencer's 'Principles of Biology'. But I had learned it from books, and pronounced it very badly, so that I had the greatest difficulty in making myself understood by my Scotch landlady ... I remember ... protesting that it was not a 'cup of tea' that I expected at tea time, but many cups. I was afraid my landlady took me for a glutton, but I must say ... that neither in the geological books I had read or ... in Spencer's *Biology* was there any allusion to such an important matter as tea-drinking.¹

Given that Herbert Spencer sometimes intimated to guests that their company was no longer wanted by plugging his ears mid-conversation, it is perhaps no surprise that *Principles of Biology* (1864, 1867) was a poor guide to social niceties.² The salient feature of Kropotkin's comment on Spencer, however, is rather its indication of his early exposure to the Englishman's ideas. As a voluminous writer and something of a nineteenth-century intellectual celebrity, Spencer exercised a crucial role in the development of European social thought in this period, one eclipsed by his subsequent reputation as the epitome of Victorian fustiness. Spencer's quest for a grand theoretical synthesis to uncover the forces that govern social life, viewing social and individual development in terms of laws of natural development borrowed from the biological

 $^{^{107}}$ Kinna, ''Kropotkin's Theory of Mutual Aid,'' 268.

¹⁰⁸ Kropotkin, Anarchism: Its Philosophy and Ideal, 3.

¹ Peter Kropotkin, *Memoirs of a Revolutionist* (London: Smith, Elder, and Co., 1899), 2:185.

 $^{^{2}}$ "Two," Home Life with Herbert Spencer (Bristol: J.W. Arrowsmith, 1910), 30.

sciences, fell into disfavor.³ "Who now reads Spencer?" pondered Talcott Parsons in his influential work *The Structure of Social Action* (1937). "Spencer is dead," he added, "his social theory as a total structure ... is dead." ⁴

Kropotkin did read Spencer, and devoted more space to him in his own writing than to any other social thinker. Between 1896 and 1904, for instance, Kropotkin contributed a series of seven articles on Spencer to the anarchist newspaper *Freedom*, which he had helped establish in 1886 at the start of his exile in Britain. His reading of Spencer decisively shaped the development of Kropotkin's own social theory, but his treatment of Spencer's ideas was not without its issues. The tendency in the scholarship is to understand Kropotkin's interpretation of Spencer in three ways. Those wishing to preserve the political relevance of Kropotkin's ideas have tended to downplay the awkward association with Spencer, or have concentrated on points of divergence. Given Spencer's status as the doyen of mechanistic social science, Kropotkin's debt sits awkwardly with anarchism's stress on non-hierarchical fluidity as

would return to protect the "monopolies" that Tucker's defense of property would perpetuate. For Kropotkin, Tucker, the arch anti-monopolist, ultimately endorsed future monopoly. 105

Spencer was an important presence in the debates that sought to define anarchism at the end of the nineteenth century. Both Kropotkin and Tucker had misgivings about his politics and, while praising him as a trenchant critic of the state, denied that his political views were anarchist, despite resonances with their own positions. The complexity of this issue stems from the fact that Kropotkin and Tucker equally denied that the other's politics was anarchist, on the basis that if taken to its logical ends, the other's thought would place limits on social freedom. For Tucker, Kropotkin denied "liberty in production and exchange, the most important of all liberties," while for Kropotkin, Tucker's individualism ignored the social basis of meaningful individuality. Moreover, Kropotkin thought that Tucker's model of free agreement was ultimately capitalistic and would lead to the reconstitution of the state that anarchists abhorred. 106 To strengthen his criticism of the individualist anarchists, Kropotkin coupled their ideas with those of Spencer-something that Tucker would have resisted, given his own reservations about Spencer's politics. Nevertheless, in Kropotkin's mind, both Tucker and Spencer were guilty of not being radical enough in their attempts to transform society. While proclaiming the necessity of far-reaching change, both thinkers fell back on the hoary myths of the "so-called 'Manchester school' of economists": the wage system, contractual free agreement, and assertive individualism. This battle of ideas was an important one for Kropotkin, in that it challenged a particular type of individ-

³ While it is important to note that organic metaphors in Victorian social thought stemmed from more sources than the natural sciences alone, Spencer tied his sociology to the biological sciences more explicitly than most. See J.W. Burrow, *Evolution and Society: A Study in Victorian Social Theory* (Cambridge: Cambridge University Press, 1966), 179–227, 262–65.

⁴ Talcott Parsons, *The Structure of Social Action: A Study in Social Theory* (New York, McGraw-Hill, 1937), 3, 3 n. 2.

⁵ Kropotkin, "Co-Operation: A Reply to Herbert Spencer [I]," Freedom: A Journal of Anarchist Communism (December 1896): 117–18; Kropotkin, "Co-Operation: A Reply to Herbert Spencer [II]," Freedom: A Journal of Anarchist Communism (January 1897): 1–2; Kropotkin, "Herbert Spencer [III]," Freedom: A Journal of Anarchist Communism (February 1904): 7–8; Kropotkin, "Herbert Spencer [IV]," Freedom: A Journal of Anarchist Communism (April-May 1904): 15; Kropotkin, "Herbert Spencer [V]," Freedom: A Journal of Anarchist Communism (June 1904): 23; Kropotkin, "Herbert Spencer [VI]," Freedom: A Journal of Anarchist Communism (August 1904): 31; Kropotkin, "Herbert Spencer [VII]," Freedom: A Journal of Anarchist Communism (September 1904): 35.

 $^{^{105}}$ Tucker was a particular opponent of the banking monopoly. See T. [Benjamin Tucker], "Monopoly, Communism, and Liberty," Liberty~4, no. 18 (March 1887): 4

¹⁰⁶ T. [Benjamin Tucker], "General Walker and the Anarchists," *Liberty* 5, no. 8 (November 1887): 4–5 and 8 (5).

With awareness of the "social truth" of voluntarism increasing as the state gradually disappeared, he suggested that the "police protection" acting most in accord with the voluntarist principle would, through open competition, gain widest public support, and thus abjure bloodshed. ¹⁰¹ Inveighing against the violence during the Homestead Strike in Pennsylvania in 1892, Tucker added that although his sympathies were with the strikers, in a future state of "equal liberty" he would act to see the preservation of free agreement:

If ... laborers shall interfere with the rights of their employers, or ... use force upon inoffensive "scabs", or ... attack their employers watchmen, whether these be Pinkerton detectives ... or the State militia, I pledge ... that as an Anarchist ... I will be among the first to volunteer as a member of a force to repress these disturbers. ¹⁰²

Kropotkin was unconvinced. He noted that Tucker followed Spencer in defending violence "for enforcing the duty of keeping an agreement," but cautioned that this was a sure way of "reconstituting under the heading of 'defence' all the functions of the state." He added elsewhere that both Tucker's and Spencer's failure was not recognizing that the "function of 'defence' of its weaker members" was the historical justification for the emergence of the state, and a remit it quickly overstepped on its path to colonizing social life. More than protecting individual rights, Kropotkin argued that the state

the *sine qua non* of utopian social relationships.⁶ The second and most common position is to acknowledge the influence of Spencer, but leave Kropotkin's reading of his work unexplored, often presenting Kropotkin's engagement with Spencer as one of basic criticism or assent, and usually focusing on the issue of social Darwinism.⁷ The third position maintains that because Kropotkin drew inspiration from Spencer's epistemology, he tended to "underestimate the extent of the ... divergences" with other aspects of Spencer's thought, and offer an "optimistic" assessment of the essential compatibility of their social philosophies. Stressing the "affinities" between his anarchism and Spencer's radical liberalism, Kropotkin sought to inject his politics with added credibility.⁸

The present article extends these interpretations by emphasizing the multifaceted nature of Kropotkin's reading of Spencer's work, focusing on three areas. He did indeed take much from Spencer. He found the epistemological basis of Spencer's system enticing, and believed that, shorn of its errors, his grand synthetic project was one that held important lessons for anarchists. Kropotkin also theorized an ontology informed by Spencerian sociology: one that saw flux as the defining feature of phenomena and equilibrium as a temporary product of perpetual tension. Spencer therefore provided

 $^{^{101}}$ T. [Benjamin Tucker], ''Protection, and Its Relation to Rent,'' Liberty 6, no. 6 (October 1888): 4.

 $^{^{102}}$ T. [Benjamin Tucker], ''The Lesson of Homestead,'' Liberty~8,~no.~48 (July 1892): 2.

¹⁰³ Kropotkin, "Anarchism," 244.

¹⁰⁴ Peter Kropotkin, "Modern Science and Anarchism" (rev. ed.), in *Evolution and Environment*, ed. George Woodcock (Montre´al: Black Rose Books, 1995), 15–107 (85).

⁶ Brian Morris, *Kropotkin: The Politics of Community* (New York: Humanity Books), 134–35, 138, 157, 249–50; Graham Purchase, *Evolution and Revolution: An Introduction to the Life and Thought of Peter Kropotkin* (Petersham: Jura, 1996). For Kropotkin's utopianism, see Ruth Kinna, "Anarchism and the Politics of Utopia," in *Anarchism and Utopianism*, ed. Laurence Davis and Ruth Kinna (Manchester: Manchester University Press, 2009), 221–40.

⁷ Caroline Cahm, *Kropotkin and the Rise of Revolutionary Anarchism:* 1872–1886 (Cambridge: Cambridge University Press, 1989), 2, 4, 6; Martin A. Miller, *Kropotkin* (Chicago: University of Chicago Press, 1976), 173, 189, 245. George Woodcock and Ivan Avakumovic´, *The Anarchist Prince: A Biographical Study of Peter Kropotkin* (New York: T.V. Boardman, 1970), 77, 129, 146, 194, 422.

⁸ David Miller, Social Justice (Oxford: Clarendon, 1976), 217, 213, 215.

Kropotkin with the intellectual scaffolding for his historical sociology, but he also informed Kropotkin's negotiation of specific debates. Secondly, Kropotkin's attempts to liberate "true Darwinism" from the clutches of those seeing "woe to the weak" as nature's axiom is well documented, but less attention has been paid to his technical understanding of evolutionary theory. 9 What this analysis shows is that Kropotkin, like many evolutionists writing before the insights of modern genetics, remained attached to the theories of Jean-Baptiste Lamarck. But more than this, it was Spencer's influential work on animal adaptation that was central to Kropotkin's attempt to navigate the debates between followers of Darwin and supporters of Lamarck that were beginning to inform the decisive split of these two approaches to evolution at the end of the nineteenth century. Finally, while Kropotkin's methodological work and writing on evolution show a clear line of influence between him and Spencer, in their politics this relationship falters. As David Miller suggests, Kropotkin frequently stressed the resonances between Spencer's politics and his own. In this, Kropotkin was partly attempting to underscore the legitimacy of his anarchism- rearticulating a politics shaped by the history of Russian communalism and French socialism in the language of British radicalism. At the same time, however, Kropotkin's critical engagement with Spencer was a fillip to his broader challenge of competing anarchist traditions. Uniting Spencer's political failures with those of individualist anarchists such as Benjamin Tucker, Kropotkin made the case for the importance of anarchist communism. Kropotkin's engagement with Spencer was therefore central to the creation of his sociology, but it was a sociology propounding a distinct political vision.

determined consistency" might be an archist.96 Yet earlier he had condemned the insidious "danger to Liberty" posed by Spencer's "half-hearted" politics.⁹⁵

Although the individualists may have been confused over their exact relation to Spencer, Kropotkin presented Tucker's politics as an extension of Spencer's, and grouped them together in order to challenge both. 96 In doing so, he drew on his communist critique of the wage system as inherently unfair, and returned to his theory that contractual relationships hastened the return of authority. He reproached "Individualist Anarchists, such as Tucker" for accepting Spencer "as he stands, with his bourgeois individualism for industrial property and his bourgeois 'retribution'"; an interpretation that Kropotkin felt missed the true "spirit" of Spencer's politics. 97 Elsewhere, he gave a pre cis of the individualist position, stating that Tucker had adopted Spencer's liberal maxim that "the powers of every individual [s]hould be limited by the exercise of the equal rights of others," and added that "following H. Spencer" he also saw a difference between "the encroachment on somebody's rights and resistance to such an encroachment."98 Committed to competition, Tucker insisted that protection "is a service, like any other service" and therefore a "commodity subject to the law of supply and demand."99 He reasoned that rather than private policing producing "tyrants," this system would ensure stability. 100

⁹ Kropotkin, *Memoirs*, 318, 317. See, for instance, Woodcock, *Anarchist Prince*, 331–37; Lee Dugatkin, *The Altruism Equation: Seven Scientists Search for the Origins of Goodness* (Princeton: Princeton University Press, 2006).

 $^{^{95}}$ Yarros, ''The Bourgeoisie's Loyal Servants,'' $\it Liberty$ 4, no. 15 (February 1887): 4.

⁹⁶ Kropotkin, "'Anarchism' from The Encyclopaedia Britannica [1910]," in *The Conquest of Bread and Other Writings*, ed. Marshall Shatz (Cambridge: Cambridge University Press, 1995), 233–47 (244).

⁹⁷ Kropotkin, "Herbert Spencer [VII]," 35.

⁹⁸ Kropotkin, "Anarchism," 244.

⁹⁹ T. [Benjamin Tucker], "Contract or Organism, What's That to Us?," *Liberty* 4, no. 26 (July 1887): 4.

¹⁰⁰ T. [Benjamin Tucker], "Competitive Protection," *Liberty* 6, no. 5 (October 1888): 4–5 (4).

Liberty. Politicized by exposure to Josiah Warren and other early American individualist anarchists, Tucker developed a resolute individualism that not only rejected the authority of the state, but also discerned a tendency to authoritarianism in the economic theory of socialist forms of anarchism.⁹⁰ Rather than the collective action favored by Kropotkin, Tucker stressed free competition as the watchword of liberty, and saw monopoly as the chief obstacle to social freedom. In 1888 he wrote: "The thing to be done ... [is] to utterly uproot Authority and give full sway ... to Liberty" and "make ... competition, the antithesis of monopoly, universal."91 Unsurprisingly, Spencer was a common touchstone for the individualists, even if they were often unclear of their exact relation to his thought. 92 Thus, on Spencer's death, it was noted with approval in *Liberty* that many newspapers were "recogniz[ing] the unmistakably Anarchistic trend of the philosopher's ... teaching."93 Similarly, Tucker praised Spencer's "celebrated law of equal freedom" but lamented that he was not the "radical laissez faire philosopher he pretends to be," concluding that the "only true believers in laissez faire are the Anarchists." Victor Yarros was similarly torn. Initially an anarchist communist before moving towards the individualists, Yarros described Spencer as an author to whom anarchists were indebted for his "scientific and philosophical argumentation which supports their position," and stated that his politics with "but a little

Specters of Comte: Synthetic Philosophy

While Spencer frequently attempted to distinguish his philosophy from that of Auguste Comte, Kropotkin saw their intellectual contributions acting in tandem. 10 Indeed, in Freedom, Kropotkin insisted that "whatever the English and Germans, who imagine that they have not suffered its influence, may say," Comte's "positive philosophy ... impressed its mark on all the speculations of the 19th century." Contrary to Spencer's own opinion, Kropotkin argued that Comte not only "gave Spencer the idea of constructing his Synthetic Philosophy," but that Spencer was in the vanguard of an intellectual movement that stretched back to the French Enlightenment, notably the "Encyclopaedists." In his extended pamphlet Modern Science and Anarchism (1901), Kropotkin developed this position, arguing that the general movement of ideas in the eighteenth century had been towards the elaboration of a philosophy that integrated intellectual advancements in other fields. Turgot, Voltaire, and Saint-Simon had taken cautious steps in this direction, but Comte unified the natural and human sciences "in the circle of sciences compassed by his positive philosophy."¹²

Despite this praise, Kropotkin discerned a weakness in the Comtean system. Following Pierre-Joseph Proudhon, an important influence on Kropotkin's vision of anarchist federalism and himself a critical follower of Comtean sociology, he discerned a worrying tendency towards hierarchy in Comte's social prescriptions.¹³ For Kropotkin, while Comte had made a

⁹⁰ William Gary Kline, *The Individualist Anarchists: A Critique of Liberalism* (Lanham, Md.: University Press of America, 1987), 57–72.

⁹¹ Benj. R. Tucker, "State Socialism and Anarchism: How far they agree, and wherein they differ," *Liberty* 5, no. 16 (March 1888): 2–3 and 6 (2).

⁹² See James J. Martin, Men Against the State: The Expositors of Individualist Anarchism in America, 1827–1908 (New York: Libertarian Book Club, 1957), 235–37.

⁹³ [No author], "On Picket Duty," *Liberty* 14, no. 17 (January 1904): 1.

⁹⁴ Italics are Tucker's own. T. [Benjamin Tucker], "Children Under Anarchy," *Liberty* 9, no. 1 (September 1892): 2; T. [Benjamin Tucker], "The Sin of Herbert Spencer," *Liberty* 2, no. 16 (May 1884): 4–5 (5).

¹⁰ See Spencer, "Reasons for Dissenting from the Philosophy of M. Comte," in *The Classification of the Sciences* (New York: D. Appleton, 1864), 27–48. See also John Offer, *Herbert Spencer and Social Theory* (Basingstoke: Palgrave, 2010), 85.

¹¹ Kropotkin, "Herbert Spencer [III]," 7.

¹² Kropotkin, *Modern Science and Anarchism* (New York, Mother Earth Publishing, 1908), 27.

¹³ Alex Prichard, "The Ethical Foundations of Proudhon's Anarchism,"

profound epistemological contribution in showing the universal applicability of the scientific method—freeing social philosophy from its fixation with "'the essence of things,' first causes,' the 'aim of life'"—he temporized when drawing political conclusions from his research.¹⁴ "When Comte finished his 'Course of Positive Philosophy,' "Kropotkin suggested:

He undoubtedly must have perceived that he had not yet touched upon the most important point—namely, the origin in man of *the moral principle* and the influence of this principle upon human life ... and to show why man feels the necessity of obeying his moral sense, or, at least, reckoning with it.¹⁵

Comte's boldness deserted him, and he placed "Humanity, writ large" in the place of God as the ballast of human morality. Theism crept back into Comte's thought, with even the "ritualism" of Christianity finding expression in his religion of humanity, ultimately exposing the tenacity of the "Christian education" that he had received. Aside from the fact that this concession to religion betrayed a vulnerable commitment to rational explanation, Kropotkin followed Proudhon in fearing that a reversion to theistic thinking opened the door to forms of hierarchy traditionally promoted by organized religion. Pecious metaphysics, in Kropotkin's opinion, had always been an ecclesiastical weapon in ensuring the domination of the many by the few, as seen in the priests whose teachings turned minds from enquiring to "depraved" at the end of

in *Anarchism and Moral Philosophy*, ed. Benjamin Franks and Matthew Wilson (Basingstoke: Palgrave, 2010), 86–112 (89–90, 92–96).

acquiring, assimilating, and co-ordinating knowledge," but presented his contribution as that of a bygone age. "With the death of Mr. Herbert Spencer," it stated, "passes away the last ... of the greatest members of the brilliant group which must make the Victorian age memorable in the history of literature and thought." In one sense, Kropotkin's engagement with Spencer's politics was a means of translating anarchist theory for a British audience. The final chapters of *Mutual Aid* show Kropotkin's sensitivity to his immediate geographical context; as he searched for examples that would strengthen his proposition that mutual aid underpinned "our ethical conceptions," he inventively seized on a number of quixotic examples familiar to British audiences: the Lifeboat Association, "cricket, football, tennis, nine-pins, pigeon, musical, or singing clubs," and the Cyclists' Alliance.

In addition to this act of translation, however, Kropotkin's critical reading of Spencer's politics also presented him with the opportunity to challenge the assumptions of another tradition that had made headway in Britain: individualist anarchism.⁸⁸ Although primarily associated with the United States—its "indigenous anarchism," in the words of one historian— individualist anarchism had a modest presence across the Atlantic, where the movement found inspiration in the efforts of American radicals such as Tucker.⁸⁹ A prominent publisher of anarchist books and translator of key texts including Proudhon's *What is Property?*, Tucker also advanced his own anarchist vision in his highly influential periodical

¹⁴ Kropotkin, *Modern Science*, 25.

¹⁵ Italics are Kropotkin's own. Ibid., 28.

¹⁶ Ibid., 29, 30,

¹⁷ Prichard, "Proudhon's Anarchism," 96–97.

⁸⁶ The Times, December 9, 1903, 9.

⁸⁷ Kropotkin, *Mutual Aid*, 300, 275, 279.

⁸⁸ John Quail, *The Slow Burning Fuse* (London: Paladin, 1978); Peter Ryley, *Making Another World Possible: Anarchism, Anti-Capitalism and Ecology in Late 19th and Early 20th Century Britain* (New York: Bloomsbury, 2013), 51–55.

 $^{^{89}}$ David DeLeon, The American as Anarchist: Reflections on Indigenous Radicalism (Baltimore: John Hopkins, 1978), 65.

For Kropotkin, the fluid communal institutions that characterized anarchist society held the promise of nurturing meaningful individuality.⁸³ Despite the broad similarity of their goals, however, they differed on their perceived route to, and source of, social stability. While Spencer looked to increasing specialization as the hallmark of advanced societies, with the market meeting those needs individuals were unable to fulfill themselves, Kropotkin decried the enervating effects of this process. His Fields, Factories and Workshops (1899) offered a sustained condemnation of the division of labor, and proposed an economic system that integrated "brain and manual work" and saw individuals free to pursue a number of productive enterprises.⁸⁴ In addition, Kropotkin cited the experience of British cooperatives, noting the distorting effects of market relationships. Forced to compete with monopolistic industries, cooperative projects often become "imbued with a narrow egoistic spirit ... in direct contradiction to the spirit which Co-operation is intended to develop."85 Solidarity in Kropotkin's social theory therefore stemmed less from the individual pursuit of happiness, and more from a preexisting tendency towards communality, seen in his ethics, and his stress on the necessity of distributive communism.

Kropotkin devoted significant space to challenging Spencer's belief that contractual relationships and market forces would maximize social freedom. That Kropotkin should have gone to this effort is surprising, since by the time of his death in 1903, Spencer's reputation had already begun to wane. Long before Parsons, an obituary notice in the *Times* praised Spencer's "prodigious, almost unrivalled, capacity for

the medieval communalist period. 18 Mirroring his subsequent treatment of Spencer, however, Kropotkin sought to explain Comte's failure through an appeal to historical context.¹⁹ Comte, according to Kropotkin, wrote before "the years 1856–1862," a period that "has no parallel in the whole history of science for the past two thousand years," and in which "metaphysics" was truly "worsted." For Kropotkin, the most significant event in those years was the publication of Darwin's On the Origin of Species (1859), a book that "eclipsed all the rest" in shaping the character of nineteenth-century thinking.²¹ He highlighted Darwin's "ideas of continuous development (evolution)" as his chief contribution, but added, in a phrase that revealed the continuing prominence of Lamarckian evolutionary precepts in this period, that the idea of species' "continual adaptation to changing environment[s]" found purchase beyond the natural sciences.²² Evolution therefore informed the fresh study of human institutions, as seen in the work of the legal historian Henry Maine, with the "scientific" treatment of historical data removing "the metaphysics which had hindered this study in exactly the same way as the Biblical teachings had hindered the study of Geology."23

Kropotkin presented Spencer as acting in Comte's train, propounding a synthetic philosophy that removed the deficiencies of Comte's positivism, but, crucially, possessed weaknesses of its own. While Kropotkin noted that Spencer's political radicalism was an important dissenting voice in Victorian Britain, he suggested that his greatest contribution lay not here, but in his

⁸³ Kropotkin, ''To Nettlau [1902],'' Selected Writings on Anarchism and Revolution, ed. Martin A. Miller (London: MIT Press, 1970), 293–307.

⁸⁴ Kropotkin, Fields, Factories and Workshops (1899; London: Thomas Nelson, 1912), 363–409.

 $^{^{85}}$ Italics are Kropotkin's own. Kropotkin, ''Co-Operation: A Reply to Herbert Spencer [II],'' 1.

¹⁸ Kropotkin, *The State: Its Historic Role* (London: Freedom Press, 1908),

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¹⁹ Miller, Social Justice, 217.

²⁰ Kropotkin, Modern Science, 30, 33.

²¹ Ibid., 34.

²² Ibid., 36.

²³ Ibid., 37, 39.

epistemological and ontological contributions. Surprisingly, he therefore directed his readers to look beyond Spencer's Social Statics (1851), the book in which he offered his famous law of equal freedom, and insisted that as all "institutions must be subordinated" to this maxim, individuals had the "right to ignore the state."24 Instead, Kropotkin commented that "the greatest service ... rendered by Spencer is not to be found in his Social Statics, but rather in the elaboration of his Synthetic Philosophy."25 First Principles (1862), in which Spencer outlined his ambition for a "universal synthesis comprehending and consolidating ... [the] ... special syntheses" of individual types of research, was identified by Kropotkin as the cornerstone of this intellectual achievement.²⁶ Kropotkin argued that by placing all phenomena in an evolutionary continuum of "formation or ... decay," Spencer had pointed towards a decentered ontology of perpetual change:

If one accustoms oneself to this method, one truly sees that all our institutions, our economic relations, our languages, our religions, our music, our moral ideas, our poetry, &c., can be explained by the same concatenation of natural events that explain the movements of suns and those of the dust that circulates in space, the colours of the rainbow and those of the butterfly.²⁷

Kropotkin adopted this universal metaphysic as the scaffolding for his historical sociology. ²⁸ This was the thrust of *Modern*

Just as liberalism, in its commitment to contractual relationships as the yardstick of freedom, fails to appreciate preexisting contexts that can make contracts resemble "feudal obligations," other forms of socialism often follow suit, making mere cosmetic changes to these relationships.⁷⁸ Some collectivists appreciate the iniquity of the "individualist principle" of remuneration, he added, and seek to "temper" its baleful effects, but their appeal to "charity ... organized by the State" is only a palliative, and the "workhouse is but a step."

For Spencer, the increasing complexity of modern society made contractual relationships the most equitable organizing principle. His evolutionary theory was integral to this idea, as he saw evolutionary development, be it "astronomic, geologic, biologic, mental and social," characterized by a move towards increasing complexity and interdependence: a trajectory from "an indefinite, incoherent homogeneity into a definite coherent heterogeneity."80 Industrial society was the highest expression of this diversity, and carried with it a "re'gime of contract ... the ... voluntary co-operation which accompanies" the "legal equality" of society's members. 81 There is much in this with which Kropotkin would agree, but the differences are indicative. Kropotkin concurred that modern societies were increasingly complex, and, consequentially, individuals ever more interdependent. Both thinkers frequently expressed this dualistically. In Spencer's eyes, modern society was tending towards an individual freedom that, given the primacy of contractual agreement, produced greater social cohesion through the shared values vital to regulating contractual relationships.⁸²

²⁴ Spencer, Social Statics: Or, the Conditions Essential to Human Happiness (London: John Chapman, 1851), 206.

²⁵ Kropotkin, "Herbert Spencer [III]," 7.

²⁶ Spencer, First Principles (1862; London: Williams and Norgate, 1875), 275.

²⁷ Kropotkin, "Herbert Spencer [IV]," 15.

²⁸ Matthew S. Adams, "Kropotkin: Evolution, Revolutionary Change and the End of History," *Anarchist Studies* 19, no. 1 (2011): 56–81.

⁷⁸ Ibid., 12.

⁷⁹ Ibid., 232, 233, 234.

⁸⁰ Spencer, First Principles, 495.

⁸¹ Italics are Spencer's own. Herbert Spencer, *The Man versus the State* (London: Williams and Norgate, 1902), 17.

⁸² Herbert Spencer, *The Principles of Sociology* (New York: D. Appleton, 1885), 1:589.

are close to his vision of communism, where distribution took place according to need. Yet, despite his praise for Spencer's vision of free agreement, Kropotkin's critique of contractualism was deeper than Miller's argument would suggest. For Kropotkin, the perniciousness of contractual relationshipsdefined by Spencer as "relations determined by ... agreement ... to perform services for specified payments"-lay in their tendency to reconstitute hierarchy.⁷⁴ Rallying against "collectivists" on the left, including Karl Marx, the American socialist Laurence Gro" nlund, and unspecified "French Marxists," Kropotkin argued that their failing was to "begin by proclaiming a revolutionary principle" and then "deny it." ⁷⁵ While they socialize the means of production in their utopian schemas, their attempts to reconstitute remuneration by introducing "labour notes" or demanding the "equalization of wages," fail to appreciate that services "cannot be valued in money ... There can be no exact measure of value ... of ... exchange value, nor of use value."76 To distinguish the importance of the labor performed would also be to accept uncritically "the inequalities of present society," Kropotkin continued, as to pay "engineers, scientists, or doctors ... ten or a hundred times more than a labourer" fails to recognize entrenched social inequality:

Let them, therefore, not talk to us of "the cost of production" ... and tell us that a student who has gaily spent his youth in a university has a *right* to a wage ten times greater than the son of a miner who has grown pale in a mine since the age of eleven.⁷⁷

⁷⁴ Spencer, *Principles of Sociology*, 493.

Science and Anarchism, in which Kropotkin attempted an historical synthesis of his own by tracing the development of this ontology of flux in the history of contemporary science. An analysis of Spencer is the pivotal point of this work. After a discussion of Comte and Darwin's epistemological influence, Kropotkin shifts from offering a commentary on the history of European thought to locating explicitly anarchist ideas within this greater arc.

A clearer exposition of his Spencer-inspired ontology, however, is found in his pamphlet Anarchism: Its Philosophy and Ideal (1897). Although Kropotkin does not cite Spencer, the argument developed is that the modern tendency in the physical sciences has been to fragment and decenter the understanding of phenomena. Kropotkin offers the history of astronomy as an illustrative example. "Take any work of astronomy of the last century," he wrote, and "you will no longer find in it ... our tiny planet in the centre of the universe." Instead, "you will meet at every step" the idea of a "central luminary-the sun-which by its powerful attraction governs our planetary world." But modern science has destabilized this, too. Now, "with the astronomer, we perceive that solar systems are the works of infinitely small bodies ... the result of the collision among ... infinitely tiny clusters of matter." Equilibrium is a temporary product of "numberless movements," and perpetual change the basic condition of phenomena: "Nothing [is] preconceived in what we call harmony in Nature."29

While science has revealed the complexity of phenomena, for Kropotkin this did not render philosophical synthesis redundant, but pressing. He observed with approval that Spencer's system progressed from an analysis of physical and chemical forces in *First Principles*, to animal life in *Principles of Biology*, to the dissection of mind and society in *Principles*

⁷⁵ Kropotkin, *The Conquest of Bread* (London: Chapman and Hall, 1906), 217, 219.

⁷⁶ Italics are Kropotkin's own. Ibid., 216, 227.

⁷⁷ Italics are Kropotkin's own. Ibid., 221, 223.

 $^{^{29}}$ Kropotkin, Anarchism: Its Philosophy and Ideal (London: Freedom, 1897), 3, 6.

of Psychology and Principles of Sociology, and morality in Principles of Ethics. Anarchism must possess similar ambition, he wrote, striving to "construct a synthetic philosophy comprehending in one generalization all the phenomena of nature—and therefore also the life of societies."30 Along with this synthetic goal, Kropotkin opined that Spencer had furnished anarchists with an invaluable technical method. Like Comte, Spencer had apparently moved beyond the "verbal, metaphysical analysis" of phenomena to a method that bore the imprint of "inductive science," searching for "an explanation of all social facts in natural causes, beginning with the nearest and simplest." So, too, Kropotkin praised Spencer for avoiding Comte's mistake of allowing theistic thinking to creep back into his system, propounding an "absolutely agnostic, non-Christian" ethics and treating all religions simply as historical phenomena.³² Kropotkin did not appreciate the subtler manifestation of theism in Spencer's sociology, in the way that Spencer absorbed a "Christian Political Economics" in his evangelical education, a secularized version of which found its way into his thought in his organic vision of society and voluntarist ethics.³³ Nevertheless, after praising Spencer for evading the temptations of religion, Kropotkin backtracked, observing that Spencer had "almost but not entirely" freed himself of the "dead weight" of religion.34

Stressing that knowledge was provisional and that while science "continually ... displaced her limits" new "problems to solve arose on all sides," Kropotkin chided Spencer for drawing a distinction between the unknown and unknowable

Principles of Sociology" to Freedom. 70 Kropotkin's dissection focused on Spencer's stress on contractual relationships as the social desideratum, and his criticism of workers' cooperative enterprises as essentially "unstable" and prone to devolving into "working-class masters employing non-members as wage-earners." In an age when the "military utopias of German Socialism" were in the ascendancy, Kropotkin noted that Spencer's defense of contract was a welcome corrective in the spirit of "free agreement," but he rejected the idea that truly cooperative labor was only achievable by "the best men." Rather, Spencer's insular gaze led him to overlook the preponderance of the "highest development of co-partnership ... already practised" across Europe, as well as its wider historical significance.⁷² Turning to Russia, as the country "where the subject has been best explored," Kropotkin argued that a host of temporary and spontaneous "artels" cohered to meet specific labor needs. While Spencer wrongheadedly clung to the "religion of Wagedom," Kropotkin suggested that these institutions not only arose to complete necessary work, but also organized distribution, often abandoning "reward proportionate to merit" in favor of "division of produce ... according to ... needs."[73]

For Miller, Kropotkin's sympathy for Spencer's defense of contractual relationships poses a problem, since Spencer saw capitalism as the quintessence of contractual freedom, whereas Kropotkin favoured communistic, "solidaristic relationships." This is clear from Kropotkin's panegyric on Russian cooperative enterprises, which, in his presentation,

³⁰ Kropotkin, *Modern Science*, 53.

³¹ Kropotkin, "Herbert Spencer [IV]," 15.

³² Ibid

³³ Boyd Hilton, *The Age of Atonement: The Influence of Evangelicalism on Social and Economic Thought, 1795–1865* (Oxford: Clarendon, 1988), 311–13.

³⁴ Kropotkin, "Herbert Spencer [IV]," 7.

^{2 (}August 1995): 259-83.

⁷⁰ Kropotkin, "Co-Operation: A Reply to Herbert Spencer [I]," 116.

 $^{^{71}}$ Herbert Spencer, $Principles\ of\ Sociology\ (New York: D. Appleton, 1897), 3:567.$

⁷² Kropotkin, "Co-Operation: A Reply to Herbert Spencer [I]," 116. 73 Italics are Kropotkin's own. Ibid.

⁷³ Miller, *Social Justice*, 214.

he fell short of developing a coherent political position.⁶⁷ He stated that the root of this failure lay in Spencer's faulty anthropological insights, but in fact, Kropotkin's critique of Spencer was broader, and informed his wider attempt to distinguish anarchist communism as the preeminent variety of anarchist thought. Conflating Spencer with representatives of the individualist tradition like Tucker, Kropotkin challenged the presumptions of both.

Spencer erred, Kropotkin argued, because he possessed a characteristically British trait. "Spencer has done this work," he wrote, referring to his sociological studies:

but with the lack of comprehension for all institutions not to be found in England which characterises the great majority of Englishmen. Besides, he did not know men, he had not travelled (he had only once been to the United States and once to Italy, where he was quite unhappy).⁶⁸

This apparent failure informed *Mutual Aid*, although an early reference to Spencer's refusal to "admit the importance of mutual aid ... for Man" is the only occasion Kropotkin indicted him directly.⁶⁹ Given Kropotkin's attempt to demonstrate the significance of mutual aid as a determinant of biological fitness, and—under the direct influence of environmental pressures—its expression as a moral belief in human societies, it is probable that he had Spencer's recent work on the subject in mind. He was certainly reading Spencer in the period when the *Mutual Aid* essays were first published: in 1896 he contributed a lengthy rebuttal of the "third and last volume of his

in *First Principles*.³⁵ In this work, a book today seen as a tortuous exercise in "arcane metaphysics," Spencer qualified his materialism by admitting that the "existence of the world with all it contains" is a "mystery ever pressing for interpretation," but ultimately inexplicable.³⁶ Invoking an unattributed article by Frederic Harrison—probably his 1884 piece "The Ghost of Religion" from the periodical *Nineteenth Century*, an issue to which Kropotkin also contributed—Kropotkin argued that Spencer's unknowable entailed a logical aporia:

Spencer ... affirmed that beyond a certain limit we have ... the *unknowable*, that which cannot be known by our intelligence: whereupon Frederic Harrison ... justly remarked ... "Well, you seem to know a good deal about this unknown of which you make an unknowable, since you can affirm that *it can not* be known."³⁷

Kropotkin believed that, although unexplained phenomena existed, Spencer had failed to appreciate the capacity of science to explain what was currently mysterious. Spencer's position was contradictory, therefore, for he discerned an unknowable that was, nevertheless, "'nowise like anything I know!" If, as the "science of the universe" had shown, humans are composed of the same "physical and chemical elements" as "Nature," to admit to the unknowable is to affirm that "it is different from all the mechanical, chemical, intellectual, and emotional phenomena of which we have ... knowledge." Kropotkin thought that by limiting the reach of empirical

⁶⁷ Kropotkin, Modern Science, 41.

⁶⁸ Kropotkin, "Herbert Spencer [VI]," 31.

⁶⁹ Kropotkin, *Mutual Aid: A Factor of Evolution* (London: William Heineman, 1902), xv. For *Mutual Aid*, see Ruth Kinna, "Kropotkin's Theory of Mutual Aid in Historical Context," *International Review of Social History* 40, no.

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³⁶ M.W. Taylor, Men Versus the State: Herbert Spencer and Late Victorian Individualism (Oxford: Clarendon, 1992), 76; Spencer, First Principles, 44.

³⁷ Italics are Kropotkin's own. Kropotkin, "Herbert Spencer [V]," 23; Frederic Harrison, "The Ghost of Religion," *The Nineteenth Century* (March 1884): 494–506.

³⁸ Kropotkin, "Herbert Spencer [V]," 23.

observation in this manner, Spencer had opened the door to mysticism, not as egregiously as in Comte's secular religion, but nevertheless such an analytical error remained a potential boon for religious propagandists. In turn, this concession to mysticism amounted to a relinquishing of power. To admit to a "force infinitely superior to ... our intelligence" with a guiding hand in the universe cleared the path for a political tyranny that mirrored this centralizing inflexibility. Closing this argument, Kropotkin returned to Laplace's famous utterance that God was an unnecessary hypothesis, approaching this statement not as a witticism, but as a cornerstone of his own credo. "The abstract, the absolute, god, the unknowable ... is a luxury, a useless superstructure, a survival that it is time to forget." "39

Kropotkin's reading of Spencer's theoretical writing was fundamental to the development of his historical sociology. Spencer, above any other thinker, provided Kropotkin with both a method for uniting the physical and human sciences, and with the ambition to invest anarchist political philosophy with the language of the latest social scientific thinking. Kropotkin praised Spencer's attempt to synthesize the specific researches of individual sciences to develop a "complete system of revolutionary philosophy," and endeavored to give his social thought the same systematic basis.⁴⁰ This research, he contended, uncovered a universe defined by perpetually antagonistic, decentred forces, a position that found support in Spencer's complex organicist metaphor. In addition, rational and scientific analysis could overcome metaphysical explanation, a common tool of social domination in the hands of religious authorities. Yet, crucially, this was a critical dialogue. Kropotkin saw important weaknesses in Spencer's synthetic philosophy that affected its analytical purchase and,

this time returned to Russia, "has been incarcerated ... by the accursed Bolshevists," gave Weismann short shrift. Summarizing his previous articles, Kropotkin concluded that "I discussed the attempt made by Weismann to prove ... changes could not be inherited, and the failure of this attempt." Kropotkin's Spencerian rejection of Weismann was predicated on a commitment to the idea that the natural world was fundamentally malleable, something Kropotkin thought was imperiled by arguments based on "immortal matter." Just as a reading of Spencer informed this notion of complexity in Kropotkin's ontology, in his evolutionary theory, Spencer was also a notable ally. Kropotkin was not only familiar with the minutiae of Spencer's work on evolutionary theory, but was inspired by it.

Politics: Contractualism and Individualist Anarchism

Kropotkin's reading of Spencer's work on evolutionary theory succored his attempt to stress the continuing importance of Lamarckian ideas to Darwinian evolution, just as his overarching epistemology and ontology emerged from an engagement with Spencer's theoretical writing. Nevertheless, despite the intoxications of scientific discovery lyrically celebrated by Kropotkin in his autobiography, for both thinkers, the real significance of casting a probing light on the natural world was its power to illuminate the human condition. It was here, in the attempt to articulate the political position that their broader philosophy supposedly adumbrated, that Kropotkin's debt to Spencer faltered. While Kropotkin acknowledged Spencer as a courageous opponent of the state—the very title *The Man Versus the State* is "equivalent to a revolutionary programme," he wrote—he argued that

³⁹ Ibid.

⁴⁰ Kropotkin, "Herbert Spencer [III]," 24.

⁶⁶ Kropotkin, "The Direction Action of Environment and Evolution," 70.

One of the chief results of the discussion ... in which Herbert Spencer took a prominent part, was to define more accurately the proper *role* of natural selection ... Natural selection cannot be the *origin* of the so-called "determinate" ... variation ... A great number of biologists sought, therefore, the origin of variation ... in the direct action of surroundings; while those for whom the main thing was to repudiate the hateful "Lamarckian factor" followed their spokesman, Weismann.⁶⁴

Elsewhere, he reiterated this position, arguing that Spencer's *Principles of Biology* and his exchange with Weismann had proven the primacy of "inherited variation" over the "selection of accidental modifications." "It is high time," he soberly concluded, that the "whole subject of inherited variations due to ... use or disuse," identified by Spencer, should be studied "seriously."

Kropotkin's criticism of Weismann showed the centrality of Lamarckian ideas to his understanding of evolution, and the tenor of his critique hints at the importance of Weismann's work for entrenching divisions between Darwinian and Lamarckian explanations of evolutionary change. What had hitherto comingled, as Darwin's concessions to use-inheritance in later editions of his magnum opus revealed, began to polarize under Weismann's influence. This explains Kropotkin's uncharacteristic enmity to the German biologist, but it also shows the importance of Spencer's evolutionary theory in Kropotkin's navigation of these debates, particularly in Spencer's capacity as an influential opponent of Weismann. Kropotkin's final paper on evolutionary theory, which appeared with an editorial prologue stating, incorrectly, that "Prince Kropotkin," by

as Spencer moved from abstract philosophy to society and politics, undermined the efficacy of his social prescriptions.

Theorizing Evolution: Darwin, Lamarck, Weismann, and Spencer

Overwhelmingly, Kropotkin's understanding of evolutionary theory is seen in the context of his writing on society, primarily in his most important text, Mutual Aid (1902). Given the prominence of the "naturalistic analogy" in Victorian political discourse, during which the newly prominent natural sciences provided a variety of metaphors, this is unsurprising.⁴¹ Moreover, Kropotkin did indeed primarily direct his polemical energy towards developing an ethical theory that highlighted the value of group solidarity and was rooted in an analysis of historical societies. As much as Kropotkin waded into the debates over Darwinism with the social application of the theory in mind, however, he had an eye firmly fixed on evolution as an issue in the natural sciences, and, like Spencer, kept abreast of these specialist discussions. In this Kropotkin was therefore somewhat exceptional: while Victorian thinkers promiscuously borrowed the terminology of the natural sciences, few participated in the technical arguments concerning species' development or engaged with the latest scientific research. For Kropotkin, evolutionary theory mirrored the dynamic ontology outlined above, and Darwin's prime contribution had been the destruction of the concept of species' essential fixity.

A neglected aspect of Kropotkin's Darwinism, however, is its debt to Spencer's theory of evolution. Given Spencer's

 $^{^{\}rm 64}$ Italics are Kropotkin's own. Ibid., 526.

⁶⁵ Kropotkin, "Inherited Variation in Animals," 1140, 1142.

⁴¹ Mark Francis and John Morrow, *A History of English Political Thought in the Nineteenth Century* (London: Duckworth, 1994), 205. See also H.S. Jones, *Victorian Political Thought* (Basingstoke: Palgrave, 2000), 74–87.

claims for his own uniqueness, 42 and his commitment to Lamarckian ideas, this may sound paradoxical, but Kropotkin spied the enduring importance of the inheritance of acquired characteristics to Darwinian theory. Perturbed by the argument of William Thomson, the future Lord Kelvin, that Charles Lyell had vastly overestimated the age of the earth, Darwin had looked to "speed up the process of evolution" to fit this new geochronology. 43 As a result, the fifth edition of On the Origins of Species bore the imprint of this debate, with Darwin adding extra stress to the direct impact of the environment on species' development-a Lamarckian formulation that had been present, but less prominent, in previous editions.⁴⁴ In looking to the importance of Lamarckian ideas for Darwinian evolutionism, Kropotkin was therefore not so much pursuing an "impossible synthesis" as highlighting a dynamic at work in Darwin's efforts to create a definitive theory of evolution. 45 And in this reading, Spencer's work was at the heart of Kropotkin's analytical arsenal.

Mutual Aid may be Kropotkin's most commented-upon investigation of Darwinism, but it was not his most detailed. In 1905, he returned explicitly to a theme implied in Mutual Aid, tracing the significance of Darwin's work to moral philosophy, suggesting that The Descent of Man (1871) had planted the seed of an evolutionary theory of ethics. 46 Writing in 1909 to William Wray Skilbeck, editor of the retitled Nineteenth Cen-

tion to another."⁵⁹ Thus, modifications occurring within the lifetime of an individual animal cannot be transmitted to its offspring.

Kropotkin rejected Weismann's hypothesis, and in doing so followed Spencer, who had himself exchanged barbs with Weismann in a series of articles in The Contemporary Review between 1893 and 1895. For Spencer, natural selection was an insufficient explanation of evolution, and he maintained that, in consequence, "inheritance of acquired characters becomes an important, if not the chief, cause of evolution."60 Weismann, in contrast, maintained the "all-sufficiency of natural selection," offering a number of examples that undermined Spencer's argument for use-inheritance.⁶¹ Kropotkin challenged Weismann for dissenting from Darwin's position on use-inheritance-something Weismann conceded- and later contended that his argument that "variation ... comes from within" ran counter to "all the tendencies of modern empiric science."62 Rather perversely given Kropotkin's objective, he then seized on one of Weismann's early Lamarckian essays, in which Weismann had offered a qualified defense of the Lamarckian principle, and highlighted a metaphysical seam in his thought, caricaturing germ-plasm as "specks of 'immortal' matter."63 While Kropotkin proceeded to raise a number of technical objections, the crux of his argument came in the form of a restatement of Spencer's correctness:

⁴² Spencer pointedly observed in his autobiography that he owed little to Darwin's work. Spencer, *An Autobiography* (London: Williams and Norgate, 1904), 2:27–28.

⁴³ Joe D. Burchfield, *Lord Kelvin and the Age of the Earth* (New York: Neale Watson, 1975), 76.

⁴⁴ For this: ibid., 76–79.

⁴⁵ A´ lva´ro Giron, ''Kropotkin Between Lamarck and Darwin: The Impossible Synthesis,'' *Asclepio* 52, no. 1 (2003): 189–213.

⁴⁶ Kropotkin, "The Morality of Nature," *The Nineteenth Century and After* (March 1905): 407–26.

⁵⁹ Italics are Weismann's own. August Weismann, *The Germ-Plasm: A Theory of Heredity*, trans. W. Newton Parker and Harriet Ro¨nnfeldt (New York: Scribner's, 1893), xi, xiii.

⁶⁰ Spencer, "The Inadequacy of Natural Selection (Concluded)," *The Contemporary Review* (May 1893): 439–56 (456).

⁶¹ Weismann, "The All-Sufficiency of Natural Selection: A Reply to Herbert Spencer," *The Contemporary Review* (September 1893): 309–38.

 $^{^{62}}$ Kropotkin, ''Inheritance of Acquired Characters,'' 516; Kropotkin, ''The Response of the Animals to their Environments [I],'' 863.62

⁶³ Kropotkin, "Inheritance of Acquired Characters," 518.

vironment was paramount, and he closed his piece on plant life with a defense of Lamarckism. He noted that while some "Neo-Lamarckians" possessed a "metaphysical turn of mind" and appealed to what he dubbed "Hegelian *Naturselec* ... to explain evolution," the real motor of change was in "the action of the physical and chemical forces affecting ... [plants'] ... tissues." Kropotkin echoed Darwin in being skeptical of the teleological thrust of Lamarckism, but thought that an important kernel of truth remained in Lamarckian theory that must be protected from the assault of metaphysics. ⁵⁶

A case in point is his treatment of the German evolutionary biologist August Weismann, where Kropotkin resurrected this charge of metaphysical speciousness. His evaluation of Weismann's germ-plasm theory is uncharacteristically prickly, something perhaps explainable given Weismann's subsequent reputation as the gravedigger of Lamarckian theory. Indeed, privately, in a letter to the Russian biologist Marie Goldsmith, Kropotkin adjudged Weismann "the Karl Marx of Biology, just as superficial ... making ... metaphysics on a foundation that will not stand up."57 Weismann was initially a convinced Lamarckian, renouncing this attachment in 1883 in a lecture that rejected the heritability of attributes acquired through "use and disuse." In his influential The Germ-Plasm: A Theory of Heredity (1893), Weismann went further, identifying "ancestral germplasms," a "peculiar substance of extremely complicated structure" from "which the new individual arises"; a substance that "can never be formed anew; it can only grow, multiply, and be transmitted from one genera*tury and After*, Kropotkin observed that important work on Darwinism remained:

I found, however, from letters received ... that ... I must discuss seriously the question of Darwinian struggle for life—and mutual aid. It is a big question as it requires a critical analysis of Natural Selection, but of the deepest interest just now, when Lamarckianism is coming so prominently to the fore.

To fill this lacuna, Kropotkin wrote that "one or two articles" will be necessary, the "second being almost entirely devoted to Lamarckianism and Darwinism," and presented "in the form of analysis of the evolution of Darwin's ideas after the publication of the 'Origins of Species'—as it appears from the 5 volumes of his letters." The scale of the project overcame Kropotkin's ambition for brevity, and the anticipated two articles became a series of seven. Etemping from his proposition that the struggle for survival had been overstated in accounts of natural selection, Kropotkin increasingly focused on other factors, beyond mutual aid, that influenced evolutionary success.

⁵⁵ Kropotkin, "The Direct Action of Environment on Plants," 77.

⁵⁶ Daniel P. Todes, *Darwin without Malthus: The Struggle for Existence in Russian Evolutionary Thought* (Oxford: Oxford University Press, 1989), 141.

⁵⁷ Kropotkin cited in ibid., 140.

⁵⁸ Ernst Mayr, "Weismann and Evolution," *Journal of the History of Biology* 18, no. 3 (Autumn 1985): 295–329 (313).

⁴⁷ Kropotkin to W. Wray Skilbeck, November 16, 1909, in Westminster City Archives [Hereafter: WCA], 716/84/23.

⁴⁸ Kropotkin, "The Theory of Evolution and Mutual Aid," *The Nineteenth Century and After* (January 1910): 86–107; Kropotkin, "The Direct Action of Environment on Plants," *The Nineteenth Century and After* (July 1910): 58–77; Kropotkin, "The Response of the Animals to their Environments [I]," *The Nineteenth Century and After* (November 1910): 856–67; Kropotkin, "The Response of the Animals to their Environment [II]," *The Nineteenth Century and After* (December 1910): 1047–59; Kropotkin, "Inherited Variation in Plants," *The Nineteenth Century and After* (October 1914): 816–36; Kropotkin, "Inherited Variation in Animals," *The Nineteenth Century and After* (November 1915): 1124–44; Kropotkin, "The Direct Action of Environment and Evolution," *The Nineteenth Century and After* (January 1919): 70–89.

In "The Theory of Evolution and Mutual Aid," Kropotkin noted Spencer's perspicacity in recognizing the importance of the "Direct Action of Surroundings" on species' development. He observed that Spencer "in 1852" had speculated that "experimental morphology" had shown that "new functions *could* modify a group of muscles, or an organ," a conclusion pointing in the direction of a similar mutability in animals. ⁴⁹ Kropotkin is here referring to Spencer's "The Development Hypothesis" (1852), an article in which he took issue with the unthinking rejection of evolution, and argued that the adaptation of organisms to their environment was an empirically sound proposition:

The process of modification has effected, and is effecting, decided changes in all organisms subject to modifying influences ... Any existing species—animal or vegetable—when placed under conditions different from its previous ones, *immediately begins to undergo certain changes fitting it for the new conditions*.⁵⁰

For Kropotkin, there was an important echo of his ontology of flux punctuated by periods of equilibrium, itself influenced by Spencer, in this perception of evolutionary adaptation. This notion of the inherent mutability of natural life he identified as one of Darwin's chief contributions, destroying as it did the foundation of the faith in organic "immutability" that had stultified scientific progress. ⁵¹ Despite this, Kropotkin cautiously criticized Darwin's reluctance to recognize the significance of direct adaptation to variability, and in doing so argued that

Spencer was not only in the vanguard of this theoretical revision, but that his biological writing remained important. Always timorous with criticism of Darwin, Kropotkin asserted that towards the end of his life Darwin was, as his "letters, published in five volumes by his son Francis" showed, coming to perceive the importance of the "direct action of the environment." At the time of the initial publication of *On the Origin of Species*, however, Darwin did not recognize, "to use Herbert Spencer's terminology," that "direct action might be ... a *direct adaptation*." 53

Following up with Skilbeck in April 1910, Kropotkin reasserted the continuing importance of the Lamarckian understanding of evolution, but also hinted at a change of tack. "When I started writing," he reported:

I discovered there was such a mass of material to be mentioned and so many important issues to discuss, that I decided to treat it in plants only, leaving animals to another essay ... In this second sketch Weismann's hypothesis might be briefly dealt with. I never imagined there should be such a mass of evidence in favour of the direct action of environment, never mentioned in several excellent recent books on Darwinism, and such a consensus of opinion in favour of the action of environment.⁵⁴

After writing on evolution and mutual aid, Kropotkin then published three further essays in 1910, the first charting the importance of direct adaptation in plant life, and then a two-part contribution on its centrality to animal evolution. These articles further entrenched his position that adaptation to en-

 $^{^{49}}$ Italics are Kropotkin's own. Kropotkin, ''Theory of Evolution and Mutual Aid,'' 98, 97.

⁵⁰ Italics are Spencer's own. Spencer, *Essays: Scientific, Political, & Speculative* (London: Williams and Norgate, 1891), 1:3.

⁵¹ Kropotkin, "Theory of Evolution and Mutual Aid," 88.

⁵² Ibid., 92.

⁵³ Italics are Kropotkin's own. Ibid., 95.

⁵⁴ Kropotkin to Skilbeck, April 14, 1910, in WCA, 716/84/39.