Science Bourgeoise et Science Prolétarienne: French Literary Responses to the Lysenko Affair

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Though scholarship of the last three decades has begun to uncover a wide range of social, political and cultural associations with both Darwinian and Lamarckian thought in France in the late nineteenth and early twentieth centuries, comparatively little work has yet been undertaken on the influence of evolutionary biology in French literary text of the mid-twentieth century. In this article, I will consider the attitudes of three major French authors of that period with respect to the evolutionary theories of the notorious Soviet agronomist, Trofim Denisovich Lysenko. Reading Lysenkoist themes in selected writings of Louis Aragon, Albert Camus and Vercors as an indicator of the authors' respective attitudes towards Stalinism and French communism, I will also consider the extent to which the views expressed are characteristic of French modes of evolutionary thought. It is my contention that the authors' engagement with Lysenkoism has much to tell us not only about the moral and intellectual struggles preoccupying the French left wing in the early Cold War period, but also about the historically ingrained preconceptions surrounding evolutionary theory that made such conflicts possible in France to an extent that would have been inconceivable elsewhere.

The Lysenko Affair

Trofim Denisovich Lysenko (1898–1976) was a Ukrainian agronomist whose work found favour under Stalin, and whose influence on the wider sphere of Soviet science persisted through the 1950s. Lysenko rejected the central tenet of modern, Mendelian genetics, according to which the processes of heredity take place through the communication of encoded organic material, the genes, from one generation to the next. He instead considered that heredity was a function of the whole organism's relationship with its host environment, reasoning that modification of the environment could effect the transformation of living organisms and, furthermore, that such acquired modifications

could be bequeathed to the organism's offspring. Astute and opportunistic, Lysenko presented his theories as the realization of certain aspects of the ideas of Marx, Engels and, most crucially, Stalin himself, thus securing the support of Soviet communist party intellectuals and ideologues from the late 1920s onward. Joel and Dan Kotek explain that the party's decision-makers disdained the idea, implicit in classical genetics, of the innate and therefore fixed inequality of individuals, preferring a biological theory which accorded a decisive role to environmental factors. The reasoning behind the Soviet communists' aversion towards Mendelian genetics was clear: if man was but the sum of his genes, and if genes could not be modified, what then would be the point of any aspiration to transform humanity and to reduce inequality?²

In 1935, Lysenko began an aggressive campaign first to silence, then to eliminate his rivals from positions of influence in Soviet institutions, with disastrous results for some of Russia's most eminent scientists and for Soviet science in general. After World War II, Lysenko focused particularly on the critique levelled by Marx and Engels against Darwin's notion of a universal and permanent 'struggle for existence', which could, in their view, have no place in an idealized classless society, the ultimate product of historical progress.³ This development became apparent in Lysenko's thought around 1945-6, the period in which Stalin declared the completion of the construction of socialism in the USSR. Since social conflict was not a feature of Stalin's idealized society, the concept of class struggle was henceforth to be considered obsolete. By means of a certain inverted logic, however, Stalin's grand ideological turn-around was also deemed to have serious implications for the Darwinian principles of evolutionary biology which had, in the first instance, been used to justify the necessity of social conflict: if the notions of 'class struggle' and the biological 'struggle for life' were interdependent, and if the former should prove to be outdated, then, it was reasoned, this would also be the case for the latter.⁴

Lysenko incorporated this shift of thinking into his ideas not in the form of a direct critique of Darwin, but rather as the basis of a reinforced attack on his own scientific adversaries, the remaining Mendelian geneticists in the USSR who were pejoratively characterized as 'neo-Darwinists' and suspected of anti-communist heresy.⁵ In the view of Lysenko and his supporters, any attempt to defend Mendelian genetics in

the USSR was tantamount to supporting Western bourgeois imperialist values supposed to have been derived from a crude social Darwinism whose utility as a theoretical justification extended all the way from the ruthless competition of American capitalism to the racial and social hierarchies of *Mein Kampf* and the eugenic horrors of Nazi Germany beyond. Lysenko's dominance over Soviet biological science was apparent at the special session of the Lenin Academy of Agronomical Sciences on 31 July 1948, during which he secured ministerial agreement to have his adversaries removed from institutional appointments and replaced by his own supporters. He went on to announce the most audacious element of his theory, to wit the idea that environmental conditioning could directly stimulate the emergence of new plant species from old. The events of summer 1948 and their aftermath came to be known as the Lysenko affair.

Lysenko in France

Western scientists watched Lysenko's rise to prominence in the 1930s and 1940s with astonishment, as there was little support for his theories outside the Soviet bloc. It was only in communist circles that Lysenko enjoyed any credibility at all, thanks to the determined efforts of the Kominform. In France, Maurice Thorez used his strong leadership style to impose strict discipline upon the Parti Communiste de France, an organization which, in Annie Kriegel's view, showed clear structural similarities with the authoritarian Soviet state from which it drew its ideological inspiration. Committed to a campaign of struggle against American economic influences and Robert Schuman's government through a campaign of strikes, demonstrations and civil disorder, the PCF came to be entrenched in a kind of pro-Stalinist sectarianism, offering its uncritical acceptance and spirited defence of all aspects of Soviet intellectual production, including the biological theories of Lysenko. Consequently, several prominent French biologists, including Jean Rostand and the future Nobel laureate Jacques Monod felt compelled to cut their links with the PCF.

The effects of the Lysenko affair were ultimately, however, felt by all card-carrying communists and fellow travellers in France due to the polemic stimulated in the left-wing press. *Les Lettres françaises* of 26 August 1948 featured an article by its Moscow correspondent, Jean Champenois, giving unqualified support to Lysenko's

theories. This was promptly followed by more in the same vein from Georges Cogniot in *L'Humanité*, who condemned Mendelian genetics, 'the doctrine of an Austrian monk', as being 'bourgeois, metaphysical and reactionary', before suggesting that the true modern inquisitors, guilty of acts of persecution against the advancement of science were none other than 'the American bankers [...] who can no more acknowledge the idea of inevitable change in nature than in society'. Other non-specialist publications became involved, with *Action* responding by attempting to reconcile aspects of Lysenkoism with Mendelian genetics. The PCF consequently felt the need to offer clear guidance to its followers on Lysenko's theories by providing an outline of his ideas and an account of the events at the Lenin Academy of Agronomical Sciences in the USSR the previous month. While it would clearly have been preferable to confide this mission to a credible evolutionary biologist, no such person volunteered; for this reason the communist poet, novelist and journalist Louis Aragon was enlisted.

Of the three French authors discussed in this article, Louis Aragon's intervention in the Lysenko affair is by far the best known, not least because of the special edition of the literary revue Europe of October 1948 which he edited and which contains a detailed account of the Lenin Academy's special session on Lysenkoism. Picking up in his editorial the assertion made by Georges Cogniot in L'Humanité that classical genetics must be reactionary and therefore false because invented by 'an Austrian monk', and Lysenkoism true because of being progressive and proletarian, Aragon admits: 'Personally, I am not a biologist. My confidence in Marxism naturally makes me wish that the Michurians [i.e. supporters of Lysenko] will be proved right in this dispute.'8 His unashamedly partisan stance clearly foregrounds the fact that he deems the scientific issues in question to be of little real relevance or, indeed, interest, when the much more pressing issue of ideological loyalties is at stake. While Aragon's posturing in the Lysenko affair won him little respect outside of the Communist inner circle, and continues to be roundly condemned by contemporary commentators as an act of 'absolute mauvaise foi'9 and as a 'dismal situation', 10 it demonstrates how attitudes towards Lysenkoism served as a kind of barometer of devotion to the Stalinist cause endorsed so enthusiastically by Thorez and the PCF establishment in the early Cold War period.

In direct contrast to Aragon, Albert Camus professes his disdain for Lysenko in *L'Homme Révolté* (translated as *The Rebel*) of 1951. David Drake sees this work as 'a radical [...] denunciation of the concept of revolution', which constitutes an important element of what he recognizes as 'Camus's unambiguous stand against Stalinism', and which 'was well received in the conservative press'. ¹¹ In the text Camus states that:

[...] it is not surprising that, to make Marxism scientific [...] it has been a necessary first step to render science Marxist through terror. The progress of science, since Marx, has roughly consisted of replacing determinism [...] by a doctrine of provisional probability. Marx wrote to Engels that the Darwinian theory constituted the very foundation of their method. For Marxism to remain infallible, it has therefore been necessary to deny all biological discoveries made since Darwin. As it happens that all discoveries since [...] have consisted of introducing, contrary to the doctrines of determinism, the idea of hazard into biology, it has been necessary to entrust Lysenko with the task of disciplining chromosomes and of demonstrating once again the truth of the most elementary determinism. This is ridiculous; to put the police force under Flaubert's Monsieur Homais would be no more ridiculous and this is the twentieth century.¹²

Camus's comments bear witness to his growing contempt for the conceptual association of Marxism and science in French left-wing circles, a political arena which in Sunil Khilnani's view had become the 'domain of the irrational', with Marxism's radical departure from its scientific origins and subsequent 'degenerat[ion] into ideology' into ideology'. prefiguring its paradoxical emergence as a paradigm on which scientific theories were to be modelled. While Camus fails to acknowledge that Marx and Engels did not retain their initial enthusiasm for Darwin, as we have already considered, he also appears to overlook the fact that Darwin's theory had itself acknowledged the important role of provisional probability in respect of the random variations between organisms which were the raw material of natural selection; to that extent, Darwin may be seen to have actively anticipated the probabilistic innovations of twentieth-century science. Camus's scathing assessment of Lysenko's role in attempting to impose determinisms of essentially ideological origin upon scientific phenomena nonetheless cuts to the very heart of the matter, and reveals his disdain for those communist sympathizers whose slavish devotion to the cause had led them to adopt a stance of willing blindness. His overt dismissal of Lysenko and, by implication, of his followers in France and elsewhere, contrasts sharply with Aragon's willing and very public abandonment of logic in the

name of loyalty to the PCF, and indirectly therefore, to Stalinism, some three years earlier.

Yet while internal structural features of the PCF facilitated Thorez's heavyhanded leadership, and thus helped, for a time at least, to minimize resistance to Lysenkoism and other controversial imports from Stalinist Russia, there are additional reasons, related to the broader history of evolutionary thought in France, which explain why some French intellectuals were more receptive to Lysenkoism than might otherwise have been anticipated. For while the theory of natural selection had proved controversial everywhere, the French were particularly hostile towards it. The highly centralized scientific community of late nineteenth-century France disdained Darwin on the ground that his theories, deduced from extensive natural observations rather than from experimental demonstration, were unverifiable and therefore fundamentally unsound, and also depended heavily on random chance, as we have already noted. 14 The attitude of the French lay-public was, meanwhile, strongly influenced by the social Darwinist themes, considered the epitome of Anglo-Saxon brutality by many, that had been foregrounded by Clémence Royer in the first French translation of *The Origin of Species* in 1862. In the decades that followed, popularized versions of the theory filtered into the wider public consciousness through the media of public education and the ever-expanding and increasingly diversified popular science press. 15

By the 1890s, literary authors from across the political spectrum were employing the rhetoric of *le struggleforlife* [sic] in ideological fiction. Right-wing reactionaries Maurice Barrès and Paul Bourget and anarchist sympathizer Octave Mirbeau attacked the early Third Republic's meritocratic public education system and its colonial ambitions respectively as examples of social Darwinism in practice. Pronatalist authors such as Colette Yver and Marcel Prévost meanwhile worried that by offering women educational access to modern scientific ideas such as Darwin's theory, the French State was encouraging them to abandon their traditional child-bearing role in order to participate more actively in the economic 'struggle for life', thus exacerbating the national depopulation crisis and the already stiff competition faced by their male counterparts in the professional employment market. Still others were concerned by the emergence of the United States of America as a prospective superpower whose vast economic capacity

and apparently unbridled ambition in commercial competition and colonialist expansion attested to the espousal of the doctrine of the 'survival of the fittest' at national level.¹⁸ The popular success of such works undoubtedly helped to consolidate the conflation of Darwin's biological theories with the social Darwinist themes accentuated by Clémence Royer in the French popular consciousness. The range of highly charged themes with which they engaged reinforced Darwinism's heavily politicized connotations, which were, for the most part, negative. As Linda Clark notes: 'Many French writers discussed the social import of Darwinism but few labelled themselves "social Darwinists." Self-proclaimed enemies of social Darwinism were more in evidence.' ¹⁹

The alternative transformiste theories of the French Enlightenment thinker Jean-Baptiste Lamarck (1744-1829) viewed the relationship between physical environment and living organism as a kind of responsive partnership in which beneficial acquired modifications could be bequeathed to the organism's offspring. During the late nineteenth and early twentieth centuries, neo-Lamarckism enjoyed a resurgence of popularity in France. With, as Stuart Persell notes, 'the idea of inherited transformation of acquired characters serv[ing] as a biological justification for [...] theoretical writings in politics, economics, criminology and a host of other fields, 20 neo-Lamarckism offered a biological justification for the notion that the French citizens of the future could be formed through conditioning in a carefully constructed socio-political environment. Lamarck's appeal undoubtedly lay partly in the progressive connotations of his optimistic theories. Positing evolutionary transformisme as a teleological process leading to the biological development of increasingly sophisticated organisms of which mankind was the ultimate product, neo-Lamarckism was the basis of a useful natural analogy for the development of increasingly progressive societies equipped with the machinery of advanced civilization such as 'governmental organizations or ethical belief systems'. 21

That such altruistic mechanisms could be envisaged within the conceptual framework of a society modelled on a 'scientific' paradigm such as Lamarckian *transformisme* further added to the theory's appeal in France. Citing the ideas of Jean-Louis de Lanessan, an influential figure and vocal neo-Lamarckian who 'held positions of national stature as a scientist and politician', and who embodied the secular and rationalistic spirit of the University-educated professionals who dominated early Third

Republic France, Persell highlights the notion that: 'Contests for survival were essentially British [...], while doctrines of reciprocal aid and biological tolerance were part of the French genius. Worse, in German society such ideas had become a dangerous creed of force and immorality.'²² A chauvinistic adherence to a scientific paradigm of French origin, which ostensibly served as the basis for a set of progressive social and political values deemed also to be characteristically French, coupled with a strong dose of xenophobia towards the nation's major military and economic rivals, thus underpinned a preference for Lamarck's ideas over those associated with Darwin in the minds of numerous French intellectuals.

Now, the extent to which Lysenko's ideas were derivatives of those elaborated by Lamarck more than a century earlier has been a subject of debate among historians of science. Dominique Lecourt, for instance, maintains that the two theories are fundamentally differentiated in respect of the levels of importance that they respectively attribute to teleology.²³ The similarities between the evolutionary theories of Lamarck and of Lysenko, notably in relation to the central roles that both attribute to environmental influences and the hereditary transmission of acquired characters, are nevertheless obvious. Eva Schandevyl supports the view that scientists with neo-Lamarckian leanings were predisposed to a qualified acceptance of the key principles of Lysenkoism, noting, with regard to the Belgian biologist and communist activist Paul Brien that being 'a neo-Lamarckist rather than a neo-Darwinist [...] was probably in part the cause of his enthusiasm for the theories of Lysenko.'24 Outside the scientific field, meanwhile, the features that had made neo-Lamarckism an attractive paradigm for progressively minded late-nineteenth-century French social theorists were causing great excitement in the Soviet communist hierarchy through the late 1940s and early 1950s. Viewed in the light not only of its favourable reception in Stalinist Russia, but also of its similarities with the neo-Lamarckian strain of social thought that had enjoyed highprofile support in French pro-Republican scientific and political circles some fifty years earlier, it is not surprising that a measure of sympathy for Lysenkoism, or at least for certain of its key principles, should have been possible in France. For the twin principles of environmental adaptation and the heredity of acquired modifications were already deeply ingrained in French evolutionary consciousness following the neo-Lamarckian

social experiments of the early Third Republic. Their familiarity, as the conceptual pillars of a home-grown social evolution model, whose non-conflictual and progressive nature gave France the moral high ground over her various Anglo-Saxon-Germanic competitors, reputedly ruthless social Darwinists one and all, laid the ground for Lysenko, even in those sectors of the French left in which there was little sympathy for Stalin.

Consequently, it is not necessarily the case that the evocation of Lysenko in French literary works functions exclusively, as with Aragon and Camus, as an indicator of the author's endorsement, or otherwise, of Stalinism. A more subtle engagement with some of the keys themes associated with Lysenkoism, integrating an appreciation of the moral and social implications of evolutionary thought with contemporary political commentary, is found in the post-war writings of Jean Bruller, who wrote as Vercors from 1942 onward, and whose status as co-founder of the resistance publishing house Éditions de Minuit and author of the seminal work of resistance fiction *Le Silence de la mer* (1942) has led to his subsequent writings being overshadowed. These works nonetheless reveal Vercors's fascination with the question of what makes us human, considered in terms of contemporary biological and ideological debates through which traces of Lysenkoism may be discerned.

Now, while French literary evocations of Lysenko and his theories following the 1948 affair need not have borne exclusively on questions of Stalinism, any analysis failing to take account of these considerations is likely to be incomplete. This is particularly true of Vercors, who like many other French intellectuals of his time, had gravitated to the PCF after the war through a sense of loyalty fostered by the communists' whole-hearted commitment to the Resistance without, however, fully embracing the party's ideals or methods. Russell Barnes sees in Vercors a 'basic sympathy with the communists in the early Cold War years, and the wishful thinking that this engendered', which rested on a belief that 'the Soviet Union represented the best hope for mankind's "liberation". His relationship with the PCF nevertheless took a definitive turn for the worse in 1956 following the Soviet repression in Hungary, homeland of Vercors's father. As the PCF declined to condemn the Soviets for their actions, Vercors felt compelled to cut his links with the party, a decision discussed at length in *P.P.C.* (*Pour Prendre*

Congé) of 1957. His response contrasts with that of Aragon, who had struggled to stay loyal to Stalin after a 1952 visit to the USSR showed him the extent to which the Soviet regime was built on terror. Doggedly upholding the supremacy of Soviet ideology in the face of his own and others' reservations, ²⁶ Aragon's actions of 1956 echoed his response to Lysenkoism a few years earlier. Yet while Vercors did not hesitate to openly criticize both Aragon and the French communist hierarchy in relation to the former, ²⁷ his attitude towards the latter is overall less easy to gauge. Succumbing to the initial temptation to view Lysenko as a simple indicator of loyalty to communist orthodoxy, Vercors's subsequent writings reveal a more ambivalent perspective about an issue on which he had been well informed from the very beginning. ²⁸

In an article written in December 1949, Vercors referred directly to Lysenko ostensibly in relation to his assertion of the basic human right to contest received ideas:

I could arrogantly assert that this is the prerogative of the scientific mind: the ability to question, at any time, what seemed to have been definitively established – universal gravitation, the wave theory of light, the Mendelian laws of heredity. Einstein, Planck or Lysenko are, above all, intellects capable of an incredible effort: that of contradicting in one fell swoop all that they had learned, all that they had thought they knew for certain.²⁹

The illustrious company in which Lysenko is depicted, as well as the clear approbation that his rewriting of evolutionary science appears to elicit from Vercors, indicate the latter's broad approval of his theories. Given that Vercors, who had begun his studies in the pure sciences before moving into engineering, was readily conversant with scientific logic, it is perhaps rather astonishing that he was so uncritical of Lysenko's ideas. Barnes, however, suggests that in matters of political conscience, 'Vercors was not always clear-sighted in perceiving where truth and justice actually lay', ³⁰ citing several examples from the late 1940s to which the above statement of support for Lysenko, understood as a gesture of political loyalty rather than as a scientifically reasoned judgement, might be added. Even more surprising, however, is the fact that Vercors wrote the article from which the above citation is drawn in order to uphold criticisms of the PCF that he had recently published in the Catholic revue *Esprit*.³¹ Suggesting, however, that despite Vercors's 'strong public challenge to the official party line, [...] his article in *Esprit* also reaffirmed in the clearest terms his continued endorsement of the communist cause', ³²

Barnes offers what may at the same time be the only feasible explanation for the author's otherwise improbable approval of Lysenko's contribution to modern science cited above, which appears in the follow-up to the aforementioned piece in *Esprit*.

Yet while for the Vercors of 1949, approval of Lysenkoism served to publicly demonstrate his continuing faith in the PCF and through it, the USSR, there may have been further aspects of the theory which appealed to him. Evolutionary themes with Lysenkoist resonances continued to feature in the author's post-war writings, in, for instance, the novels Les Animaux dénaturés (1952) and Sylva (1960), both conceived as demonstrations of Vercors's basic thesis that: 'What makes a man is his struggle against nature.'33 Viewing humanity not as an innate condition but rather as a state to be attained by overcoming the baseness of our essential nature, Vercors's ideas is that this essentially moral struggle requires man to overcome not only the forces of nature in and around him, but also 'those other adversaries – those men who oppress and kill their fellows, and in so doing serve as accomplices of metaphysical evil'. Now, Vercors's notion that the evolution of humanity is dependent on the suppression of struggle among fellow-men evokes one of the key themes of Lysenkoism, i.e. the idea that intra-species struggle is not a feature of natural evolution, but is rather an error on Darwin's part which has been appropriated by bourgeois capitalists and subsequently used as a justification for all sorts of abuses. Targeting American scientists as the products of bourgeois ideology, Lysenko explained in a 1947 article:

Servants of capitalism, they don't need to struggle against the elements, against nature, they need a struggle between two varieties of wheat, belonging to the same species, and this struggle is invention on their part. Thanks to the supposed existence of intra-species struggle, this 'eternal law of nature' that they've created from scratch, they try to justify class struggle, the oppression of the blacks by the whites. How could they ever own up to the non-existence of intra-species struggle?³⁵

In accusing his 'bourgeois' rivals in the West of formulating scientific paradigms with the specific intention of justifying the existence of oppression and inequality in their societies, Lysenko effectively launches an attack on the social Darwinist interpretations of the theory of natural selection which, as we have already noted, had continued to

inspire widespread French hostility since the publication of *The Origin of Species* in 1859.

In situating the biological and moral complexities surrounding the notion of intraspecies struggle at the very heart of Les Animaux dénaturés of 1952, Vercors therefore draws not only on a long-established strain of French thought, but also evokes more recent debates on the French left stimulated by the Lysenko Affair. In the novel, Doug Templemore, an English journalist participates in an expedition to the jungles of Papua New Guinea during which living examples of a kind of 'missing link' between man and the higher primates are found. If the 'Tropis' are classified as animals, they stand to be exploited as slave labour by Australian corporate interests, who will then be able to compete with their British rivals in the textile industry; legal recognition of the Tropis' humanity is therefore the key to their freedom. In order to force the issue, Templemore kills the offspring he has sired by means of artificial insemination with a Tropi mother and has himself arrested and charged with murder. His guilt, and ensuing death by capital punishment, rests on whether the hybrid offspring is deemed in an English court of law to have been human or animal. While the first trial ends with a hung jury, the second ends in a satisfactory compromise due to the judge's good sense in contriving to have Templemore acquitted while acknowledging the full human rights recently conferred upon the Tropis by an Act of Parliament. This Act also, conveniently, serves to protect British commercial interests by preventing Australian competitors from using the Tropis as slave labour.

The difficulty in providing a precise delineation between man and beast is, however, in Vercors's view, no abstract philosophical debate. It rather provides a framework in which to consider the issue of man's inhumanity in relation to those whom he is willing to recognise only as lesser versions of himself, as foregrounded by the still recent events of the Holocaust and the racist theories pervading the decolonisation question, as Templemore reflects:

Here then, all ready to reappear [...] are the grimacing face of racism and its infernal consequences. And what sort of racism...! A racism in whose name whole populations will tomorrow be deprived of their membership of the human race and of all ensuing rights, to be sold in their turn as mere livestock...Where will we set the limits...?

Wherever the strongest ['les plus forts'] desire it to be set. Imagine what will happen to the natives in the colonies, to the blacks in the states where segregation is practised! And more generally, to all ethnic minorities!³⁶

In his allusion to the political and economic dominance of the strong over the weak, Vercors seems to rail against the crude social Darwinism which both French neo-Lamarckians and Soviet Lysenkoists habitually held up in opposition to their own supposedly progressive egalitarianism. This sentiment is even more explicit in *Zoo*, *ou l'Assassin philanthrope*, the play based on *Les Animaux dénaturés* that Vercors published in 1964, in which one of the expedition members proposes: 'That racism is the law of the survival of the fittest, nothing more. And [...] the day that the peoples of Asia and Africa become the strongest, then they'll be able to do the same to us.'³⁷

It is also, then, significant that Vercors chose to situate this work outside the domain of French influence, preferring, in the manner of numerous French thinkers before him, to associate a crude social Darwinist model of social and economic relations with the abuses of human rights considered to be characteristic of the Anglo-Saxon world. Not content merely to depict the subordination of the debate about the nature of humanity to the economic interests of the British and their colonial competitors in Australia, Vercors goes on to ironically expose the contemporary race debate, based on the clear presumption of a hierarchy of races headed by the Anglo-Saxon, through the intermediary of the English palaeontologist Greame who states: 'And in fact, between [...] between a British citizen and a...eh...and the least civilised Negrito, the biological distance is substantially less than that separating a Negrito and the chimpanzee...'38 Yet while the evocation of this historical French hostility towards the Anglo-Saxon world may well have been an appeal to the prejudices and preconceptions of a French audience, it is also possible that Vercors used the attribution of such attitudes to the Anglo-Saxon as a means of levelling a more generalized critique of certain unpalatable aspects of colonialism that surely applied just as much to France as to her *outre-Manche* rival.

By the late 1950s, Vercors had well and truly distanced himself from the PCF, and Lysenko's influence had been greatly diminished both within and outside the USSR. Yet while the intertwined political and scientific considerations that had informed his writings of the late 1940s and early 1950s were perhaps no longer foremost among his

concerns, reflections on the nature of humanity continued to preoccupy Vercors, as shown in the 1960 novel Sylva, which recounts the transformation of a fox into a woman in the 1930s English countryside. While the reasons behind Sylva's miraculous physical transformation remain obscure, in psychological terms she is presented as 'a human creature in a state as pure as that of the original mutation, without ancestors and without social conditioning, emerging among us completely fresh [...] from animality'. 39 Sylva is thus conceived as a kind of living *carte blanche* whose personal development from the wordless savagery of 'the palaeolithic era' to the 'calm assurance of modern British civilization, 40 effectively recapitulates all of mankind's evolution in the course of months. Yet in returning to the themes of the boundary between animality and humanity, and man's struggle to acquire humanity which are at the heart of Les Animaux dénaturés, Vercors also indistinctly evokes the Lysenkoist theme of species transformation by means of environmental conditioning. For it is Sylva's education by her mentor, a good-hearted English country gentleman named Richwick, which is seen to have led to the suppression of her brutal natural instincts and her acquisition of the self-consciousness, reason and morality which, in the author's view, constitutes the true 'point of no return'⁴¹ in respect of Sylva's attainment of humanity. It may then be that the optimistic and progressive connotations associated with both French neo-Lamarckism and Soviet Lysenkoism continued to inform Vercors's ideas.

Conclusion

Given the scientific and political controversy that surrounded Lysenkoism, it is hardly surprising that direct references should be conspicuously absent from Vercors's writings after 1949. In view of his subsequent break with communism and continuing interest in biology, it is even possible that Vercors came to be embarrassed by his apparent early enthusiasm for Lysenko. In *Questions sur la vie* (1973), an extended dialogue between the author and the biologist Ernest Kahane about the philosophical implications of modern biology, the latter suggests that 'the neo-Lamarckian position, already damaged by its lack of experimental verification, has been further compromised by the deplorable ['pénible'] Lysenkoist episode', ⁴² a statement which Vercors neither contradicts nor returns to anywhere in the text. His silence suggests that he may well have preferred to

draw a cloak of discretion over his own positive responses, however limited these may have been, to an episode whose historical significance ultimately has more to do with the conflict between intellectual honesty and political loyalty facing French communists and fellow-travellers in the early Cold War period than with the development of evolutionary science.

Yet while it is easy to understand why figures such as Vercors and Aragon may, in later life, have preferred not to dwell on their respective pronouncements on Lysenkoism made at the height of the tensions generated by the Cold War, the publication in France in 1990 of Les Robes blanches, Vladimir Doudintsev's satirical novel recounting the events of the Lysenko affair, nonetheless provided an opportunity for France's literary left to address the issue from the position of security engendered by the recent fall of the Berlin Wall. Presented to the French audience as one of 'perestroika's great bestsellers', 43 the text was praised in the communist daily L'Humanité for its neo-Tostoian breadth of vision as well as for its historical accuracy and quality of construction.⁴⁴ The description of the Lysenko affair as a witch-hunt carried out against the 'partisans of the "the monk Mendel" also, however, contains a kind of mea culpa on behalf of French communism in relation to the Lysenko affair. For in this veiled allusion to Georges Cogniot's attempt to undermine classical genetics in his August 1948 article which appeared in L'Humanité itself, and to which, as we have already noted, Louis Aragon made subsequent reference in the October 1948 issue of Europe, a tacit and long overdue acknowledgement of the pure mauvaise foi shown by the Parti Communiste de France and numerous of its supporters in respect of the notorious affair is surely to be found.

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¹ The history of the reception of Darwinism in France was largely ignored prior to the appearance of Yvette Conry's *L'Introduction du darwinisme en France au XIXe siècle* (Paris: Vrin, 1974). Since then, numerous studies of French attitudes towards Darwinian and Lamarckian evolutionary theory have appeared, including Linda L. Clark's *Social Darwinism in France* (Alabama: University of Alabama Press, 1984), Jean-Marc Bernadini's *Le darwinisme social en France* (1859-1918) (Paris: CNRS, 1997) and Stuart

M. Persell's *Neo-Lamarckism and the Evolution Controversy in France 1870 – 1920* (Lewiston, NY: Edwin Mellen Press, 1999), among others.

² Joel and Dan Kotek, *L'Affaire Lyssenko* (Paris: Éditions Complexe, 1986), p. 60. Unless otherwise stated, all translations from French-language texts cited are my own. Note that the differing transliteration of Russian proper nouns gives 'Lysenko' in English and 'Lyssenko' in French.

³ See, for example, Clark, *Social Darwinism in France*, pp. 81-82 and Dominique Lecourt, *Lyssenko: histoire réelle d'une 'science prolétarienne'* (Paris: Maspero, 1976), pp. 118-119.

⁴ Kotek and Kotek, L'Affaire Lyssenko, p. 77.

⁵ Ibid., pp. 80-83.

⁶ Annie Kriegel, *Les communistes français, essai d'ethnographie* (Paris: Éditions du Seuil, 1970), p. 368.

⁷ Kotek and Kotek, *L'Affaire Lyssenko*, p. 139.

⁸ Louis Aragon, 'De la libre discussion des idées', *Europe*, 33-34 (Oct 1948), 3-29 (p. 6).

⁹ Kotek and Kotek, L'Affaire Lyssenko, p. 142.

¹⁰ Sunil Khilnani, *Arguing Revolution: the Intellectual Left in Post-War France* (New Haven: Yale University Press, 1993), p. 92.

¹¹ David Drake, *Intellectuals and Politics in Postwar France* (Basingstoke: Palgrave, 2002), p. 84.

¹² Albert Camus, *The Rebel*, trans. by Anthony Bower (Harmondsworth: Penguin, 1962), p. 188.

¹³ Khilnani, Arguing Revolution, p. 92.

¹⁴ Clark, Social Darwinism in France, pp. 10-12.

¹⁵ See, for example, Bernardini, *Le darwinisme social en France*, pp. 236-238, and Bernadette Bensaude-Vincent and Anne Rasmussen, *La Science populaire dans la presse et l'édition* (Paris: CNRS, 1997), pp. 16-19.

¹⁶ See Louise Lyle, 'Charles Darwin dans *Le Jardin des supplices*', *Cahiers Octave Mirbeau*, 14 (2007), 47-64, and 'Le Struggleforlife: Contesting Balzac through Darwin in

Zola, Bourget and Barrès', *Nineteenth-Century French Studies*, 36 / 3&4 (2008), 305-319.

¹⁷ See Chapter 3, 'The Female and the Species: Radical Feminism and Social Darwinism' in Louise Lyle, 'Social Darwinism and the Evolutionary "Struggle for Frenchness" in Fin de Siècle Fictions', unpublished doctoral thesis, University of Sheffield (2004), pp. 128-185.

¹⁸ Philippe Roger highlights numerous examples of social Darwinist rhetoric in French writings on America from the late nineteenth and early twentieth centuries, citing from the works of essayists Octave Noël, Edmond Demolins and Henri de Beaumont, and the popular serial novelist Gustave Le Rouge. See Philippe Roger, *L'Ennemi américain* (Paris: Seuil, 2002), pp. 199, 218, 264, 366.

¹⁹ Clark, Social Darwinism in France, p. 7.

²⁰ Stuart Persell, *Neo-Lamarckism and the Evolution Controversy in France, 1870-1920* (Lewiston, NY: Edwin Mellen Press, 1999), p. 178.

²¹ Ibid., p. 187.

²² Ibid., p. 186.

²³ Lecourt, *Lyssenko*, p. 122.

²⁴ Eva Schandevyl, 'Soviet biology, scientific ethos and political engagement: Belgian university professors and the Lysenko case', *Journal of Communist Studies and Transition Politics*, 19 (2003), 93-107 (p. 102).

²⁵ Russell Barnes, 'Vercors: Morality and Commitment', *Modern and Contemporary France*, 50 (1992), 3-9 (pp. 7-8).

²⁶ See Nicole Racine, 'Louis Aragon', http://biosoc.univ-paris1.fr/maitron/Dico/varia.htm [accessed 20 December 2007].

²⁷ Vercors scathingly acknowledges Aragon's influence as president of the Comité National des Écrivains as that of an 'illustrious protagonist of the tendency for inaction', referring to the CNE's unwillingness to directly criticize Soviet actions in Hungary. See *P.P.C.* (Paris: Albin Michel, 1957), pp. 67-69.

²⁸ Vercors had personally observed the controversy unfolding around Lysenkoism at the Wroclaw Peace Conference, held from 25-28 August 1948. See Kotek and Kotek, pp. 129-134.

²⁹ Vercors, *Plus ou moins homme* (Paris: Albin Michel, 1950), p. 176.

³⁰ Barnes, 'Vercors: Morality and Commitment', p. 7.

³¹ The article was written for the journal *Les Lettres Françaises* in late 1949, but was never published there, appearing instead in a volume of collected articles published the following year. See Vercors, *Plus ou moins homme*, pp. 175-182.

³² Barnes, 'Vercors: Morality and Commitment', p. 8.

³³ Vercors, *Plus ou moins homme*, p. 47.

³⁴ Barnes, 'Vercors: Morality and Commitment', p. 4.

³⁵ Cited in Kotek and Kotek, p. 78. The article originally appeared in the Soviet revue *Literaturnya Gazetta*, and was reprinted in French in *Europe*, 18 October 1947, under the title 'Why does bourgeois science oppose the work of Soviet science?'.

³⁶ Vercors, *Les Animaux dénaturés* (Paris: Livre de Poche, 1952), p. 92.

³⁷ Vercors, Zoo, ou l'Assassin philanthrope (Paris: Magnard, 2003), p. 93.

³⁸ Vercors, *Les Animaux dénaturés*, p. 77.

³⁹ Vercors, *Sylva* (Paris: Bernard Grasset, 1961), p. 188.

⁴⁰ Ibid., p. 275.

⁴¹ Ibid., p. 270.

⁴² Vercors, *Questions sur la vie* (Paris: Stock, 1973), p. 108.

⁴³ See the back cover of Vladimir Doudinstev, *Les Robes Blanches*, trans. by C. Glogowski and A. Roubichou-Stretz (Paris: Robert Laffont, 1990).

Anonymous, 'Une Mémorable Affaire', *L'Humanité*, 21 March 1990, http://www.humanite.fr/1990-03-21_Articles_-UNE-MEMORABLE-AFFAIRE [accessed 20 December 2007].