## Lancelot Hogben-Scientific Humanist

An unauthorized autobiography

L.Hogben

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The name of Hogben, may have been known to literally millions, as the author of 'Mathematics for the Million'. In addition to this he wrote a number of other popular books 'Science for the Citizen' out of which simplified versions may have been extracted, as I recall reading in my childhood some popular lavishly illustrated books with his name on the cover. I had no idea though, until the reading of this book, based on left over papers found in his 'Nachlass', his scientific credentials. Those appear to have been impeccable as that of a succesful experimental biologist with strong side-interests in mathematics and linguistic.

The beginnings were not auspicious growing up in a bigotted religious family in which indepedant reading was severely curtailed. He refers to his parents as being intellectually dishonest, which may be about the harshest criticism someone of his character may levy against anyone. In fact his description of his parents is rather brief and he seems not to have missed their passing away with any regrets. Religious indoctrination of the very young is supposed to be very bad, on the other hand those who survive it by transcending it seem to get an early instruction to critical and independent thinking<sup>1</sup>.

It is not clear whether those notes that form the present book were ever intendes for publication, and even if one suspect that the author would have intended to polish them. Those sections in particular that deal with his childhood are not very evocative, and in fact are marred by confusion. Clearly in writing them the author wanted to get over with them as soon as possible, childhood in a mature and public life should be but a preliminary, although in private contemplation, it usually usurps a far larger portion of a recollected life. In its awkwardness it does bring home the skill with which the truly great autobiographies are written, and here I am in particular thinking of the one by Bertrand Russell, and thus how boring most written autobiographies invariably tend to be to those not intimately concerned. Two things can at least be gleaned from his early reminiscences. One an early fascination with the biological world and the concomitant determination to become a biologist, and secondly a scholarly indifference in his early years, a lethargy out of which he was only shaken during a period of convalescence in which he discovered the secret of self-education<sup>2</sup>. One may naively believe that an experience like his would turn him against traditional schooling as being outdated and too much focused on drill and memorization, and other horrors of which modern pedagogues love to raise arms against.

<sup>&</sup>lt;sup>1</sup> One may also argue that only those with a critical and independant character will be able to transcend it, buit that would seem to be a concession to natures triumph over nurture

 $<sup>^2</sup>$  incidentally providing the rationale for his forays in popular scientific writing in his more mature years

On the contrary, like most intellectually succesful people, they do not lose sight of the ultimate importance of school - the imparting of skills and learning, through discipline and work. Clearly whether people like being at schoolor not is secondary. He writes with scorn about rich people sending their progeny to expensive private schools more often ran by cranks than not in order for their children to be spared the ordeals of learning anything<sup>3</sup>

. With bemusement he recalls his visit to the school run by Russell and his then wife Dora Black. Asking Black about Russells role in teaching, especially mathematics given his axiomatic outlook as a pure mathematician, she replied that Bertie did not interfere anymore having discovered that children do not like mathematics. When pressing her on what the children actually learned, she responded, (like a true modern educator?) that it was more interesting to discuss what she learned from the children.

Having discovered his aptitude (and much can be said for discovering your aptitude youself rather than to have it discovered by your parents) he set out to do well and in due time earned himself a scholarship to Cambridge in 1913 at the age of eighteen<sup>4</sup>. At the time it was quite rare that Cambridge students came form such humble social backgrounds as he did, and without the additional newly instituted support for poor promising students giving to residents of the greater London area, it is not clear whether he would been able to afford it otherwise. Cambridge before World War I was quite different from what it would later become. Most of the students were wealthy and played around, on the other hand an elite institution like Cambridge prided itself on its brains, and people with scholarships were raised above the so called commoners who had their ways paid for them by their parents.

His time at Cambridge was dominated by study, initially somewhat distracted by a fascination for chess, as well as being politically active, his social pedigree and intellectual precosity inevitably marking him out for the left<sup>5</sup>. The First World War found him a conscientious objector, a status only recently distinguished from that of deserter, and for which his pacificist activities actually earned him some time in jail. He should not complain though, in spite of the hardships, many of his friends suffered far more serious one, including those of commuted death-sentences<sup>6</sup>

Hogben survived the horrors of the war, but not the agonies and moral challenges connected with it, and thus as a young man of little more than twenty, having acquired a maturity of which most Western people in our tampered age usually do not posses until much later in life. Initially he was at a loss what to do, what path in life to follow, as it was far from clear that a scientific one was possible. He toyed with journalism, having realised that he was not cut out to be a politician, lacking the temperament for compromise and

<sup>&</sup>lt;sup>3</sup> Otherwise Hogben remarks that children who grow up in homes with books and real discussions, not only small talk, have a huge advantage, then listing with paternalpride the rather pedestrian accomplishments of his own. Did he forget his own background? The case of educational advantages is more complicated.

 $<sup>^4</sup>$  Hogben was born in December 1895.

 $<sup>^{5}</sup>$  As he remarks, his readiness to embrace a secular creed, was no doubt due to having shed his theism, and the natural abhorence of the vacuum, exhibited by nature

<sup>&</sup>lt;sup>6</sup> In Russells autobiography the autor recall incidents of people suffering so badly in imprisonment as to be marked for the rest of their lives, some of the remainders being not very extended.

the ability to suffer fools gladly. He had also sired children and subsequently married a radical feminist - Enid Charles, to whom he would remain attached for more than thirty years, as well as picking up the habits of smoking and drinking<sup>7</sup>.

One of the charms of a successful scientific career is the mobility it both invites and enforces. The bulk of his text charters his professional migrations, with due emphasis on the interesting people he met, and the problems and intermittent triumphs of private earnings, the financial circumstances of a scientits being rather modest compared tothat of the social circles he gained access to<sup>8</sup>.

Hogbens career took him first to Edinburgh, then to Canada, down to Cape Town, then back to London and an interldue as a Social Biologist at the London School of Economics before proceeding to Aberdeen, and then after a wartime interlude including stops at Uppsala, and an escape along the Transsiberian railway, ending up in Birmingham. Not the most prestigious institutions, yet the signposts of a most solid career, involving election to the Royal Society<sup>9</sup> When offered positions down in Cape Town and later Aberdeen, he was given run-down or non-existant departments to build up from scratch with generous endowments or received grants. Challenges to which he rose enthusiastically.

A true biologist wants to get on-hands experience, especially getting them dirty and wet, and although at one time a vegetarian in his youth, influenced by the example of Shaw, he never shared the latters virulent opposition to vivisection. On the contrary, his entire experimental biological career was built on serial vivisection on a grand scale. It also means that he is not indifferent to the immediate surroundings. Canada with its sparse fauna and flora disappointed him, and the long and cold winters depressed him; while Cape Town was an embarrassment of riches, with exciting species available by only turning a stone, or swooping up some sea water. In fact the Cape literally straddles two oceans, as on its Western Atlantic side it is washed by cool Antarctic currents, while on the east caressed by tepid ones from the Indian Ocean. The temperature gradient is steep. A similar ecological dichtomy he would encounter in Aberdeen, where the two rives the Dee and the Don, run close to each other, but with very different eco-systems. In South Africa he would encounter the dawn of apartheid, a political development which made his sustained residence impossible. As he was a child the Boer war was a much discussed afront to the might of the British Empire<sup>10</sup>, and he naturally became very curious about the history of the region and its invariable complexities.

Hogben came of age in the 20's and 30's, thus participating in an intellectually and politically exciting period in Britain. Thus his memoirs contain a fair amount of name

 $<sup>^{7}</sup>$  The veiled references to drink, seem to indicate at least a potential problem in that regard, at least during certain periods of his life.

<sup>&</sup>lt;sup>8</sup> In particular he refers to a dinner party at the Wellses, to which he and his wife had no proper clothes to match the formality of the other guests. The hosts made them comfortable though, by dressing down into garments more appropriate to wetweeding their garden, while presiding at either end of the table.

<sup>&</sup>lt;sup>9</sup> In a revealing aside, the author remarks that he wanted to be sure to have been elected to that prestigious society before he let publish any popular texts, like that of the abovementioned 'Mathematics for the Million'.

 $<sup>^{10}</sup>$  Playing a similar role that the Vietnam War did in the 60's in the States, although with opposition far more controversial, than it would turn out to be in latter case.

dropping, in which some people are summarily dismissed as fools, while even some of his closer friends come up for censure. Of Julian Huxley, the brother of Aldous Huxley, he remarks that his influence was out of proportion to the originality of his research record, probably because of his experience in the States during the First World War, when the Americans had made spectacular progress in many biological areas, acquiring expertise to bring to the backward Britons. In addition to H.G. Wells, whose sons he tutored, he was a one-time Fabian entering into the charmed circle of Sidney and Beatrice Webb. He also made a one-time encounter with the Garsington of Lady Otteline Morrell, being more enchanted by the lovely garden, than with the quality of the conversations. Russell he met of course, and all the great British biologists, Haldane in particular. Naturally he is an intellectual snob, relishing the sophisticated conversation, and having nothing but contempt for those who cannot measure up.

On the other hand a book like this make few intellectual demands on the reader, being more in the nature of the rambling reminiscenses appropriate to a after dinner sherry, thus there is no discussion of his work in demography and mathematical genetics, topics more congenial to his mathematical interests, one would surmies, than biology performed by scapel. In one of the few biological asides, the reader learns that iron-centered haemoglobin, exploited by vertebrates and worms, is replaced by haemocyanins, in crustacea, snails and mollusks, such as octapus, in which iron is replaced by copper. Our venous blood is dark red, while our arterial is pink, saturated with oxygen; while with haemocanin, the venous blood is blue, and the arterial basically transparent.

His sojurn at the LSE was something of a disappointment to him. That school was originally seen as a training ground for socially conscious individuals to further the visions of the left, and hence the rather naive assumption that the study of economics would be very useful. Hogben has only scorn for the Viennese mystics such as von Hayek, whose brand of economics, he compares with the mental equivalent of astrology. One reason he was given the position as professor of the newly created Social Biology, he speculates, was to prevent the appointment of some Eugenicist, Hogben having a reputation as a staunch opponent to Eugenics, and the fashionable at the time ideas of a racial difference and the genetic basis for intelligence<sup>11</sup>. He stayed for a few years, keeping a *piede a terre* in London, while having their base in Devon, taking advantage of a quick express connection. When Beveridge, who had championed him left, he himself took off for Aberdeen.

What about adventures? The most adventurous episode inn his life was when being stuck in Oslo on the day of the German invasion. Aberdeen had kindled his interest for Scotland and the various Norse archaisms in their dialects, which had motivated him to learn all three Scandinavian languages at one go, as well as achieving a reading expertise of old Norse<sup>12</sup>. This knowledge came him into good stead as he managed to enlist some Norwegian Native to deliver him to the Swedish border. Thanks to the international reputation he had gained though his 'Mathematucs for the Million' and the Swedish customs gurad actually had read the book, he was able to cross with his daughter, without proper papers. Then there followed a prolonged stay at Uppsala, a city of few redeeming fea-

<sup>&</sup>lt;sup>11</sup> Hogben pointing out that the breeding of livestock and dogs with their long charts of pedigrees, were a poor analogy for human breeding, as in the latter mating was more of less haphazard.

<sup>&</sup>lt;sup>12</sup> He claims that he was always setting aside one day of the week to indulge in his intellectual hobbies

tures he thought, except its medieval cathedral. In Uppsala e happened to have a trusted Swedish colleague - Gunnar Dahlberg, who shared Hogbens views on Eugenics. In spite of congenial company<sup>13</sup> he felt himself trapped, and continued his escape flying to Riga and Moscow and then travelling to Vladivostok on the transsiberian railway. He noticed the monotony of a landscape basically untouched by humans, until the Baikal lake. In Japan he was fascinated by the gardens, and as a reader one is struck by references to mosquito nets. Due to having been robbed of his cash by customs officials, hos departure from Japan was delayed, something he relished in retrospect. What followed was a soujourn in Wisconsin, but in spite of offers, he was anxious nevertheless to return to war-time Britain.

At the end of his life he settled in Wales, having met a Welsh woman, teaching him her language, and becoming his twilight companion, after the break up of his first marriage in the early 50's, a break-up greatly faciliated by they having lived apart during the war years. The memoir appears to have been written in his last year of life, newly widowed, and looking forward to death as a well earned sleep. He succumbed in the summer of 1975.

April 22, 2007 Ulf Persson: Prof.em, Chalmers U.of Tech., Göteborg Swedenulfp@chalmers.se

<sup>&</sup>lt;sup>13</sup> Dahlberg had a horror of physical exertion, citing statistics that sportsmen had short life expectancies. He himself succumbed rather early to an undiagnoses canser of the pancreas.