"Holmes into Challenger: The Dark Investigator"

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Sherlock Holmes, that confirmed bachelor famously immune to Cupid's darts, has had many children. Polyphiloprogenerative, he must be suspected of fathering a good proportion of the population of modern crime fiction, as well as hundreds of instantiations of himself in many narrative, dramatic, and pictorial forms. And we can suppose that Holmeses yet unborn are already queuing up in some hyperfictional waiting room, like the apparitions of Banquo's heirs vouchsafed by the witches to Macbeth. My subject in this essay is one of the earliest adaptors of Sherlock Holmes: Arthur Conan Doyle himself. Apart from Holmes and Dr Watson, Conan Doyle's next best-known serial character is Professor George Edward Challenger, explorer of the Lost World and hero of four other tales. I intend here to explore the kinship between the two, and some of the ways that Challenger is both a continuation and a criticism of what was embodied in Holmes. To give away the plot in a way Conan Doyle would never have done, this essay will examine these two figures in their role as knowledge-men, researchers and discoverers, and I will argue that in them, and the popular fictional genres that contain them, we can find Conan Doyle's complex and serious response to the Victorian knowledge revolution.

There are many ways we might account for the popularity, productivity and fascination of Sherlock Holmes. One is these is his remarkable ability to function as a portmanteau of a number of the most compelling social themes of the Victorian imagination – not just to embody these things, but somehow to act as a sort of dialectical synthesis of what seem on the face of it to be irreconcilably antithetical ideals. In the popular imagination, as in the unconscious, there are no irreconcilable differences. Holmes is, for example, as he never tires of boasting to Watson, a scientific detective. He is a materialist in an uncompromising late-Victorian mould – proclaiming, in 'The Sussex Vampire': "This agency stands flat-footed upon the ground, and there it must remain" (Doyle, *Case-Book* 73) – with a rigorous methodology, determined to purge the personal and emotional element from his cases, frankly and often rude about Watson's efforts to render his case histories in literary form, the results of Watson's romanticism producing, Holmes complains, "much the same effect as if you worked a love-story or an elopement into the fifth proposition of Euclid" (*The Sign* 5). And yet at the same time Holmes is an incorrigible dandy and an aesthete – the Baudelaire of Baker Street as I have called him elsewhere (Kerr 132) – a prince of subjectivity, prone to substance

abuse and lolling on the sofa for weeks on end, but practicing the art of detection for its own sake, indifferent to monetary reward, a virtuoso of style, devoted to his work as the only way of staving off the *ennui* of belatedness and his bourgeois surroundings.

Holmes is also an instance of two very significant nineteenth-century inventions: in his detective work he is both an amateur and a professional. Again, he is uncannily intuitive, solving problems by those unaccountable flashes of superhuman brilliance which the Romantics imagined were the working methods of genius. But at the same time he is a positivist, a thoroughly materialistic and practical processor of data, unable to theorise in advance of the facts, and similar to those cybernetic inventions with which his contemporaries were starting the mechanization of intellectual work.[1] Watson accuses him of being "an automaton, a calculating machine" (*The Sign* 15). Then, in token of the beginning of the long love affair between the public and the show business and its stars, Holmes is an exhibitionistic showman, parading his skills like a conjuror, master of the *coup de théâtre*, with a devoted fan club of at least one. Yet he is also anti-social and misanthropic, almost friendless, a depressive drop-out and a Tennysonian melancholic.

All these myths – or you can call them stereotypes if you like – jostle within the person of Holmes, making him in an overdetermined way very much a man of his time. It is a repertoire that could take us in almost any direction. Here, however, I am interested in Holmes the scientifically principled investigator in single-minded pursuit of knowledge, avatar of the age of modern scientific research and expertise. It is this aspect of him that links him to Challenger: both are, in my terms, dark investigators.

We know his methods, of course. Both the first two Holmes books have a chapter entitled "The Science of Deduction", and he is quite happy to give a demonstration of his skills, inferring an entire career from Dr Watson's pocket watch, for example, or from Dr Mortimer's walking stick. In both these cases, as well as in his brilliant reading of crime scenes, Holmes produces a narrative from a relic – something left behind. He is participating in what T. H. Huxley was to call "backtelling" (Huxley 6). The backteller practiced a scientific discipline with a historical dimension – like geology, archaeology, historical linguistics or evolutionary biology – reconstructing the past from partial evidence, in confidence that the laws of nature were infallibly

[1] For example, the adding machine patented by William Seward Burroughs in 1888, the year after the first appearance of Holmes in print.

uniform. Such scientists had reading and interpretative skills beyond the powers of common readers, skills that enabled them to construe a total narrative from fragmentary relics, as Darwin had famously described the geological record as an imperfect history, of which we possess only scattered lines from a few pages of randomly surviving chapters of a single volume, written in a changing dialect (Darwin 315-16).[2]

The case of Watson's watch, from the first chapter of *The Sign of the Four*, is not only a good example of Holmes's working method of backtelling, but is offered as such, a pedagogic demonstration of the investigator's powers. His brilliant analysis of the clues offered by this object unlocks the story of the life and death of Watson's alcoholic brother, its former owner. But this hermeneutical virtuosity is a performance, a kind of party piece. After all, Watson does not need to be told his own brother's story. Since in this case nothing is at stake epistemologically, it is not hard to see the darkness, as well as the brilliance, of the investigation. To demonstrate his intelligence is inevitably to show up the intellectual dullness of Watson, and everyone else, and Holmes almost never bothers to palliate this. His investigations are without exception stagings of competitive egotism, often enhanced by a childish enjoyment of keeping his companion or his fellow-professionals in the dark until the last flourish of revelation. In this way Holmes plays the mysteriously gifted shaman or magician, vested in a kind of awesome personal authority that Max Weber was to theorize as *charisma* operating within a structure of domination.[3] Charisma, in an increasingly bureaucratizing age, is a bit of a throwback. But Holmes's charisma is entirely modern, his methods bound by scientific protocols, as he always insists, and therefore properly detached, disinterested, having in theory no personal investment in the results of the investigation. The combination of intellectual detachment with competitive self-regard and charismatic egotism produces results that can sometimes be little short of monstrous. In the case of the watch, it is a matter of the crass and wounding disregard of Watson's feelings for his unfortunate brother and the reputation of his family. Ignorance for Holmes cannot be an excuse: the identity of the watch's former owner was the first thing he deduced. It simply does not occur to him that the watch had, as the cliché goes, a sentimental value, or that an exposition of its history would cause his friend

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[2] Holmes expounds his own theory of interpretative backtelling in his article "The Book of Life", which speaks of inferring an Atlantic or a Niagara from a drop of water *(A Study* 18-19).

[3] "*Rationally regulated* association within a structure of domination finds its typical expression in bureaucracy…. The *charismatic* structure of domination rests upon individual authority which is based neither upon rational rules nor upon tradition." Weber ii 954.

distress. Brilliant in his reading of material symptoms, when it comes to affect Holmes can be a dangerous illiterate.

Here we can begin to home in on the place of Holmes in the history of the Victorian knowledge revolution. The nineteenth century invented the expert, the knowledge-man specializing in a single domain of expertise, consulted in difficult and challenging cases beyond the powers of the generalist. Holmes is a consulting detective, and so far ahead of his time as to be probably the only one in the world. His highly specialized self-education has entailed a refusal to interest himself in domains of general knowledge – such as whether the sun goes round the earth or vice versa – which is of no use to him. This narrow and mechanical specialism belongs, clearly, to an age of industrial manufacture, but it was also being enshrined in the structure of the professions as these evolved in the nineteenth century, including that best known to Arthur Conan Doyle, the profession of medicine. Here, words like "consultant" and "specialist" had their own meanings.[4]

In nineteenth-century Britain, developments in the institutions of medicine had produced a professional structure consisting of a minority of specialist consultants, at the top of the pyramid, and a majority of general practitioners, the "subordinate grade" of family doctors, working in a locally-bound practice. Specialists were expected to be up-to-date with the latest international research, and were brought in to advise on challenging cases where an expert opinion was required. General practitioners, less expert, often relied on local knowledge of the community and a good bedside manner. Consultant specialists and general practitioners were interdependent, however, united by the institution of referral: normally, a specialist would only see a patient who had been referred to him by the local doctor. The GP lived among the community he served, his patients were his neighbours, and he was often familiar with several generations of their families. The specialist received patients in his clinic or consulting rooms, preferably in Harley Street in London, removed from the patient's own environment, or else he might be parachuted in to visit a specially interesting or lucrative patient, before returning to his own professional space.[5]

To the general practitioner, the specialist could appear an overpaid arrogant show-off, more

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[4] For a more detailed exposition of the relation of Conan Doyle's life and writing to cultures of knowledge, see Kerr 41-122.

[5] Masculine pronouns seem appropriate for generalizations about Victorian doctors. See Digby, Loudon, Porter and Perkin. Women were utterly debarred from the profession until the 1870s, and began to practice in very small numbers thereafter. See Dixon Smith, and Conan Doyle's story "The Doctors of Hoyland" (*Round the Red Lamp* 256-72).

interested in the case than in the patient, and unlike the family doctor, not obliged to live with his mistakes. To the specialist, the GP must often have seemed provincial, unscientific, and bumbling, a shirker of responsibility. The specialist was expected to be modern and scientific in his knowledge and methods, an expert technician, while the general practitioner tended to practice a much more social form of medicine, where empathy and interpersonal skills might be the best he had to offer. This was the structure of the profession Conan Doyle joined when he put up his plate as a physician in general practice in Southsea, and it had very important implications for his fiction. He was familiar with it for years from the point of view of the subordinate grade.

The relationship between specialist expertise and a more general and local knowledge is reproduced in the fictional partnership between Sherlock Holmes, the world's first consulting detective, and John Watson, an army doctor who goes into general practice. Tensions within the structure of the medical profession – and, I will argue, within the broader domain of scientific knowledge – can be felt in the somewhat sado-masochistic friendship between these two men, Holmes's narrow focus, intellectual dominance and arrogance and his insistence on scientific method, and Watson's relative ineptitude, but consistently more humane responses to the cases they investigate. Holmes has a professional network – consultants could not begin to operate without one – but his manners are alienating and, apart from Watson, he has no friends at all.

In some Holmes stories too, the role of the local man is taken by a policeman such as Lestrade, though the police also had a professional structure of local practice – the 'manor' or 'beat' – and a consultant elite based in Scotland Yard. Lestrade is the professional superior of the neighbourhood constable on his beat, and is brought in as an expert to take over serious cases. But Lestrade in turn is happy, or grudgingly willing, to call in the consulting detective Sherlock Holmes on particularly baffling problems. Athwart this professional hierarchy of authority and technique (and Weberian structure of domination) runs another line, differentiating between the uniformed branch and the plain-clothes officer (plain clothes could be an investigative convenience but also seems to have signaled a class difference), and between the professional police detective and the amateur gentleman sleuth, whose investigation is often motivated more by sporting instincts than the obligations of paid employment. Both professionals (like Holmes) and amateurs (like Holmes) were inventions of the Victorian age.

Sherlock Holmes's first case, recounted by Watson in *A Study in Scarlet* (1887), is a good place to

observe the drama of investigation performed by this new culture-hero, the expert. Holmes is brought in to the Jefferson Hope case by means of a classic referral in the form of a letter from Gregson, the Scotland Yard man, asking for his help. Holmes is satisfied that this invitation from the subordinate grade is couched in appropriately respectful language – "He knows that I am his superior, and acknowledges it to me" (*A Study* 25) – and agrees to go to investigate the crime scene.

While making his own swift and penetrating examination of the death room at Lauriston Gardens, Holmes speaks patronisingly and sarcastically to the police investigators and ridicules their ham-fisted deductions. After some brisk and expert observations, he tells an admiring Watson that his mind is already entirely made up on the case, though some details remain to be filled in. But at this stage he will not share his knowledge with the police or with Watson (*A Study* 33). This is an indication of Holmes's competitiveness and might be considered unprofessional behaviour: it is hard to imagine a medical or legal consultant, for example, keeping his conclusions secret from those who have commissioned them. This withholding of information undoubtedly prolongs the police investigation as the officers are left to bumble around after false clues. But Holmes has no interest in helping the police to close the case. Indeed in many Holmes stories the great detective is scandalously uninterested in "police procedure", the apprehension, examination, trial and punishment of wrongdoers, the process of dealing with transgression which is supposed to underwrite the ideological reassurances of the detective genre. Holmes's refusal to disclose what has come to his knowledge till it can be revealed in an impressive *coup de théâtre* will be, of course, habitual. He has, we might say, his own timetable for the publication of his research findings.

All this is of course enjoyable, and impressive in its way. What we are witnessing is an early triumph of Holmes's scientific method – a method which incidentally was acknowledged by its Victorian practitioners to include a measure of what C. S. Peirce called abduction (see Sebeok and Umiker-Sebeok), and John Tyndall in a famous lecture titled "The Scientific Use of the Imagination". But already we may discern shades of darkness encroaching on this investigation, shades adumbrated in the first information we were given about Holmes, concerning his flogging of corpses to research postmortem bruising, which caused Watson's friend Stamford to opine that Holmes was "a little too scientific for my tastes – it approaches to cold-bloodedness" *(A Study* 8). Holmes is certainly brilliant, and we never doubt that he is right. But already in his first outing he is displaying many of the qualities – arrogance, snobbery, lack of feeling – which Conan Doyle may

well have met in the consultants retained by his Southsea patients to give a second opinion on his own diagnoses, and which, according to Owen Dudley Edwards (200), he had first encountered in “the inhumane attitudes towards patients” of the lordly medical panjandrums at Edinburgh University. And after all these were just the qualities which inclined lay people to be resentful and even fearful of the growing army of expertise, including medical consultants, even while acknowledging a need for their help. Impersonality might be a principle of scientific methodology, but there were times when it looked like a deficit of humanity. “It is of the first importance,” Holmes has already lectured Watson, “not to allow your judgement to be biased by personal qualities. A client to me is a mere unit, a factor in a problem.” (*The Sign*15)

When Watson – who, we should not forget, has risked his life and seen men die in battle – enters the room at Lauriston Gardens where Enoch Drebber lies dead, he does so, he says, “with that subdued feeling at my heart which the presence of death inspires”; he describes the scene with his usual dependable realism, but he adds that never had death appeared to him in a more fearsome aspect *(A Study*, 27, 28). Conventional pieties, perhaps. Holmes’s feelings, however, are not so much subdued as non-existent. He is in the presence not of death, but of data, and appears quite unmoved by what he has come to inspect. Here is how he goes to work on the body.

> As he spoke, his nimble fingers were flying here, there, and everywhere, feeling, pressing, unbuttoning, examining, while his eyes wore the same faraway expression which I have already remarked upon. So swiftly was the examination made, that one would hardly have guessed the minuteness with which it was conducted. Finally, he sniffed the dead man's lips, and then glanced at the soles of his patent leather boots.
>
> > "He has not been moved at all?" he asked.
> >
> > "No more than was necessary for the purposes of our examination."
> >
> > "You can take him to the mortuary now," he said. "There is nothing more to be learned." (*A Study* 29)

The procedure is more like an autopsy, of course, than the examination of a living patient. Still, there is something predatory about the way Holmes plunders the body for information, in a manner both highly intimate and quite lacking in feeling or respect. This is the affect-free expert at work, in all the abstraction and distance intimated in that faraway look, his mind concentrated on the accumulation of knowledge which we can call the “case”, apparently careless of the human

implications of his actions or their consequences. Holmes, as I said before, is a figure of the artist as well as a scientist, and we may be reminded of his dexterous skills as a violinist. So a slight shift of angle enables us to watch Holmes performing on the body of Drebber, those expert fingers extracting information from him as they might extract music from the instrument. The faraway look shows this artist not in the grip of some great emotion, but abstracted and absorbed in his own amazing technique. He practises an art for its own sake, the other human figure in the scene entirely objectified and indeed instrumentalised to enable this performance of virtuosity.

The abstraction, the coldness and carelessness of affect, and of course the virtuosity, are qualities that reappear in the incident of Watson's watch. My contention is that these were qualities that were becoming recognised as the dark side of scientific expertise, and that for Conan Doyle they were most familiarly associated with the figure of the medical specialist. There are plenty of other examples of this noted deficit of human feeling among the many other scientific materialists who appear in Conan Doyle's fiction. One is Dr Horace Selby, a successful specialist in the story "The Third Generation", whom we see examining a young patient in his consulting room, inspecting first a rash, then his teeth.

> "Now your eye." He lit a lamp at the patient's elbow, and holding a small crystal lens to concentrate the light, he threw it obliquely upon the patient's eye. As he did so a glow of pleasure came over his large expressive face, a flush of such enthusiasm as the botanist feels when he packs the rare plant into his tin knapsack, or the astronomer when the long-sought comet first swims into the field of his telescope. *(Round the Red Lamp* 53)

The allusion to Keats's figure of the astronomer, "some watcher of the skies, / When a new planet swims into his ken" (in the sonnet "On first looking into Chapman's Homer"), does nothing to dispel the uncanny and frankly creepy tone of this moment, and after all the investigator here is directing his instrument not at the uninhabited cosmos but into a human being's eye. There is a similarity to Holmes's reading of the corpse at Lauriston Gardens, except that here it is a living patient who is objectified and disarticulated under the concentrated Foucauldian gaze of the examiner, deploying his expert knowledge ("This is very typical") to glean data from the helplessly docile body as if it were a specimen for his collection and professional advancement. What Dr Selby has seen in the young patient's eye, to trouble his cold blood with that slightly sexualised glow and flush, are the early signs of an incurable syphilis, inherited from a dissolute grandfather.

Furthermore the patient, himself sexually innocent, is shortly to be married. These are the circumstances that lie behind the case that brought the specialist his involuntary gratification. The next morning he will read in his breakfast newspaper that his patient, upon leaving his consulting rooms, took his own life. It seems unlikely this regrettable outcome will stop the great venereologist from including this interesting case in the monograph he is writing on the subject.

It would be hardly surprising if a suspicion that medical specialists tended to care more for the case (and their own reputation) than for the patient was a prejudice quite widely entertained in the ranks of the subordinate grade, the general practitioners like Conan Doyle himself. Before widening my focus, let me give one more example of this reading of consultant behaviour in the person of Sherlock Holmes. *The Hound of the Baskervilles* is perhaps his most famous case. It also marks his reappearance in print after the hiatus that followed "The Final Problem", though its events predate the encounter with Moriarty at the Reichenbach Falls. Since *A Study in Scarlet*, Holmes had had moments when his cold heart had seemed to warm up, and when he showed definite signs of obedience to ethical imperatives: we can attribute these to the good influence of his companion Watson. But when he returns in *The Hound*, Holmes seems to have reverted to his earlier dark-investigator ways, a narrow-minded materialistic egotist with poor social skills.

The Hound is a classic consultancy case, beginning with a conventional referral when Dr Mortimer, a country physician, calls on the great man to take up the case of Sir Henry Baskerville, the patient and friend whose life, Mortimer believes, may be in danger beyond his powers to understand or combat. Holmes immediately and rudely dismisses Mortimer's own theory of the case as "a collection of fairy tales", hopelessly unmodern and unscientific, but he agrees to bring his expertise to bear in Sir Henry's interest. Holmes gathers information, 'taking the patient's history' as physicians put it, and asserts his authority by getting Sir Henry Baskerville to promise that he will obey his instructions (similar to the well-known 'doctor's orders'). But when Sir Henry is to travel from London to Dartmoor to take up his patrimony at Baskerville Hall, Holmes unaccountably declines to travel with him. Instead he entrusts Sir Henry to the day-to-day care of his subordinate, Dr Watson, who is instructed to send regular reports on the progress of the case to Holmes in London. Like the general practitioner he actually is, Watson can now observe the patient in his local environment, and he and Sir Henry become friends, sharing the domestic life of Baskerville Hall, while Holmes remains aloof in his metropolitan base. Or so Watson believes. As a matter of fact,

and unknown to Watson, Holmes has travelled to Devon, in disguise as a tourist, and he takes up residence in an old abandoned hilltop hut from which vantage he can observe all the surrounding countryside. This eccentric and undermotivated course of action ("my presence would have warned our very formidable opponents to be on their guard" *(Hound* 124), is his later unconvincing explanation) is entirely consistent with the consultant's aloofness, self-mystification, and taste for looking down on everybody. Holmes's tendency to appear dramatically against the skyline, surveying his grim surroundings from some commanding crag, gives a most Gothic image of the dark investigator in the isolation, superiority, and inscrutability of his great powers.

Holmes's strange and reckless aloofness makes a fool of Watson, and probably endangers Sir Henry Baskerville, but Holmes as usual is thoroughly focused on solving the mystery of the case, and equally indifferent to the welfare of the man whose life has been entrusted to him, and to the feelings of the companion he is unable to consider an equal. At his own pace again, he meticulously moves towards a position of complete knowledge. "Our case becomes rounded off," he will later tell Watson. "I shall soon be in the position of being able to put into a single connected narrative one of the most singular and sensational crimes of modern times" *(Hound* 145). The case approaches completion, but what of the safety of the man at risk? This brings to mind the old medical joke – the operation was a complete success: unfortunately the patient died. Sir Henry does not die. But he nearly dies, and Holmes is responsible, as he will later admit (*Hound* 152). The human consequences of the consultant detective's fastidious delay are nearly fatal, for a sudden fog rises (the London specialist, of course, lacked the local knowledge to predict this), disarranging his plans, and Sir Henry is attacked and badly wounded by the hound, and suffers a nervous breakdown in consequence. In the final chapter Sir Henry, a broken man, departs to try to recover his health in the care of the faithful GP Dr Mortimer, after visiting Holmes in the consulting rooms at Baker Street to express his thanks, though it is not entirely clear what for. Holmes, needless to say, is "in excellent spirits" over his success in this and other cases *(Hound* 158). For him, the case has been an unambiguous triumph.

It is no doubt the case that Conan Doyle, like the public opinion he so often seemed to embody in the society of his time, worried about the tendency of scientific investigation to abstraction and what I have called a deficit in humanity because he was temperamentally inclined to idealize science as the principal agent of change and progress in modernity. Like many thousands of others

of his generation, the young Conan Doyle had turned to science to supply what religion was no longer able to offer him, and he had a great and lifelong respect for scientific men. Much of the most significant scientific research in the earlier decades of the nineteenth century had been accomplished by investigators of a kind for which there is not really a satisfactory name - freelance, amateur, or gentleman scientists. But by the latter part of the century much research was both institutionalised and nationalised. There was, for example, in the decades after the Franco-Prussian War of 1870, a famous rivalry between two celebrity scientists, Robert Koch in Germany and Louis Pasteur in France. Such men were carriers of national prestige. As much scientific research was literally becoming invisible to the naked eye, the scientist himself was increasingly visible, indeed spotlit, as a paladin of knowledge who was also a culture-hero, with a large team of assistants, and supported by increasingly impressive funding from universities, foundations, and the state, which his work (and occasionally hers) required. Since Galileo pointed his telescope at the moons of Jupiter, scientific knowledge had been moving out of the reach of lay people, steadily and then, late in the nineteenth century, rapidly. With the professionalization of science, and the gathering of scientific communities in universities, institutes and clinics, there also developed of course an increasingly specialised language of sciences which excluded anyone who was not trained and up to date in it. Meantime, it was increasingly difficult for the amateur scientist to produce cutting-edge research without the kind of expensive facilities and equipment, requiring constant modernization, that only institutional funding could supply. The laboratory scientist went about his business in his arcane way, and his findings, reported in technical language in specialist journals and unverifiable except by other experts, had to be taken on trust. In a literal sense, his work could not really be questioned by the layman.

In the late decades of the nineteenth century, medicine was an international affair, and important knowledge events, such as the unveiling of Robert Koch’s so-called cure for tuberculosis in Berlin in 1890, which Conan Doyle attended as a reporter, attracted medical men from all over the world, and the attention of the world’s press. The vaunted cure for tuberculosis, a disease responsible for one in every seven deaths in the mid-nineteenth century, was in several ways a paradigm moment in the nineteenth century knowledge revolution. It was also a significant turning point in the career of Arthur Conan Doyle.

When he went to Berlin in 1890, Conan Doyle was an obscure thirty-one-year-old provincial

general practitioner, with a second-string career in literature. He was somewhat overawed by the busy international stir created by the news of the cure, but was not nearly important enough to secure an interview with Koch himself, and was rudely rebuffed by Koch's mighty colleague Professor Ernst von Bergmann, when he begged the great man to let him attend the lecture demonstrating the cure. (Bergmann himself had two years before been in a furious public dispute with the English physician Sir Morell Mackenzie over a misdiagnosis of the German crown prince Friedrich, and was ill-disposed to English doctors.) While he remained somewhat overawed by Koch himself, Conan Doyle began to form in Berlin a more skeptical view of the profession of science, for which he had previously nurtured a thoroughly romantic esteem.

The profession's tendencies to abstraction, self-mystification, careerism, and a neglect of ethical responsibilities were crystallized in Conan Doyle's several reports on Berlin in terms of the representation of character, just as they had been in the character of Holmes.[6] He witnessed the rudeness and egotism of Bergmann, the political pressure on Koch which went with his promotion as a national hero, the insulation of the great men of knowledge from ordinary people. It was an open secret that the German authorities, seeking to steal a march on their French rivals, had obliged Koch to make a public announcement of his findings prematurely, and the cure for the scourge immediately became an international media sensation, with claims being made for it which a proper scientific caution would not have advanced at this stage. Sure enough, Koch's tuberculin treatment proved not to be a cure for tuberculosis, but not before, in Conan Doyle's words, "a wave of madness had seized the world", and thousands of consumptives from all corners of the earth had flocked to Berlin hoping to be cured, "some of them in such advanced stages of disease that they died in the train" *(Memories* 90). Conan Doyle says he saw the delivery at Koch's Berlin address of sacks full of letters from all over the world, "a sign of all the sad broken lives and wearied hearts which were turning in hope to Berlin" *(Memories* 89). The trumpeted consumption cure, developed by a world-class scientist, fuelled by arrogance and forced by institutional and national rivalry, was an ethical disaster which bore down most cruelly on the weak and helpless. Koch survived this setback, and became one of the first Nobel prizewinners in medicine, in 1905. Conan Doyle

[6] He wrote about what he saw in Berlin in a letter to the *Daily Telegraph* (*Letters to the Press* 35-37), a commissioned article for W. T. Stead's *Review of Reviews* ("Dr Koch"), and later in the memoir *Memories and Adventures* (87-91). He later claimed his *Telegraph* letter was "the very first which appeared upon the side of doubt and caution" about the cure. *Memories* 90. See also Kerr 79-99.

returned from Berlin determined to devote himself to a career in literature.

His second best-known serial character is another instantiation, celebration, and critique, of this essential Victorian and modern figure, the expert investigator. When we meet Professor Challenger he is not a practicing physician (he may not even be a professor), but a research scientist.[7] He is not a cruel man, but he cares for nothing but knowledge and his own reputation, and seems oblivious to the fact that science lives in a world of human power. As in the case of Holmes, here too the pleasurable proceedings of popular fiction contain intimations of the egomania and irresponsibility that expertise is heir to, when new knowledge is pursued for its own sake and heedless of its human implications. Challenger is an enjoyable grotesque, but he contains (and fails to contain) an anxiety that scientific expertise might be getting out of control. In this respect he is a twentieth-century Frankenstein. And so his monomaniacal scientific expedition to the Lost World, in Conan Doyle's scientific romance of 1912, is a geographical project that ends in genocide, indeed species extinction, for the coming of these modern adventurers to the lost South American plateau has a direct result in the liquidation of the indigenous apemen. At the same time, the discovery of diamonds in the swamp of the pterodactyls has the unintended but inevitable consequence of leaving the no longer lost world open for future spoliation in the name of material interests, on the model not just of Costaguana in Conrad's *Nostromo* (1904) but of the appalling exploitation of central Africa that Conan Doyle himself had recently condemned in *The Crime of the Congo* (1909). This terminal damage to a unique environment and its inhabitants seems a stiff price to pay for an advance in scientific knowledge, but once again it is a price not paid or even heeded by the scientist himself, who returns to London as a celebrity, in as excellent spirits as Holmes upon his return from Dartmoor, undaunted and untainted by the catastrophe he has left behind to run its course. The investigation is heroically accomplished. The consequences are not his concern.

There is a further dimension to this question. If knowledge was entrenched as a secular profession in the Victorian age, it was definitely a masculine one, with an agenda to control and dominate a

[7] Challenger does not appear ever to have held a university position, and finances his work by private means. His title may be simply honorific, as seems also to be the case with his irascible exact contemporary, Professor Henry Higgins in Bernard Shaw's *Pygmalion* (1912). It appears later, in *The Land of Mist* (278-79), that Challenger did practice as a doctor in his youth.

material world traditionally conceived as feminine.[8] When Francis Galton surveyed the profession in 1874, he published his findings in a book entitled *English Men of Science* (naturally enough), and argued that there was something inherently masculine in the business of research.

> The female mind has special excellencies of a high order, and the value of its influence in various ways is one that I can never consent to underrate; but that influence is towards enthusiasm and love (as distinguished from philanthropy), not towards calm judgement, nor, inclusively, towards science. In many respects the character of scientific men is strongly anti-feminine; their mind is directed to facts and abstract theories, and not to persons or human interests. The man of science is deficient in the purely emotional element, and in the desire to influence the beliefs of others.... In many respects they [scientists] have little sympathy with female ways of thought. (Galton 206-07)

If this is a good description of the woman-averse investigator Sherlock Holmes, it is an even better fit to the hypermasculine Professor Challenger, as we may see in the penultimate Challenger story, "When the World Screamed", published in the *Strand* in 1928.

This tale is the story of another scientific research project. It is narrated by a rather colourless engineer, names Peerless Jones. Jones is summoned by Professor Challenger to be the junior co-investigator or research assistant in a project to test the great man's belief that "the world upon which we live is itself a living organism, endowed ... with a circulation, a respiration, and a nervous system of its own" *(Maracot* 268). Jones's first reaction is to think Challenger a madman, but the engineer is soon overborne by the great man's charismatic vision and domineering personality: he is incapable of embodying the moral counterweight that Watson could sometimes supply to Holmes. In order to test his hypothesis, Challenger has begun the epic labour of sinking a great shaft eight miles deep into the earth's crust, at a site on the Sussex Downs. As the culmination of the experiment, his intention is to drive a sharp drill, a hundred feet long and driven by an electric motor, deep into the body of the earth. Here we can see the ancient trope of Mother Nature made literal: Challenger is out to prove the earth not only life-giving but itself (or herself) a living being. The method that recommends itself to him for this operation is the infliction of pain. The egregious violence he is set on offering to the earth itself can be read as a satire on the phallic rapacity of science, the darkness of scientific investigation when it has broken loose from its responsibilities to

[8] This is a trope that goes back to Aristotle, but had also been an organizing figure of Mary Shelley's *Frankenstein*, in which scientific discovery is consistently represented as a stripping and penetration of a femininized nature.

the human and natural environment. Challenger himself, needless to say, is entirely unaware of these considerations, and this is indeed the point. As ever, he acts like a spoilt and anarchic infant – here getting ready to act out a fantasy which would hold no surprises for Freud – and a Nietzschean Übermensch exercising the will to power over nature to which he feels his superiority entitles him.

While Jones somewhat reluctantly constructs the drill to his master's specifications, Challenger makes his final preparations. He does not neglect the public relations appropriate to his celebrity, and summons an audience of thousands to witness the event. At the site, the nerves of the earth are exquisitely exposed, as in an anatomical drawing. "A dark purple fluid appeared to pulse in the tortuous anastomoses of channels which lay under the surface. The throb of life was in it all." *(Maracot* 304) At the apogee of the research project, as Jones recounts, "my iron dart shot into the nerve ganglion of old Mother Earth and the great moment had arrived" *(Maracot* 305*)*. It is an appropriate climax to the age of the dark investigator. This maternal rape results in an explosion, expelling the penetrating instrument, and this is immediately followed by a great spray of foul fluid, a "gush of putridity" *(Maracot* 308). The voice of violated nature, a sounding cataract now become the anti-matter of the Wordsworthian sublime, is heard in a terrible, indescribable scream – "No sound in history has ever equalled the cry of the injured Earth" *(Maracot* 306) – a scream of pain and protest simultaneously uttered by every volcano around the world. The experiment has been a resounding success. Challenger's hypothesis is proved, and he is able to bask in the admiration of the throng of onlookers, overawed by "the mighty achievement, the huge sweep of the conception, the genius and wonder of the execution" of what they have witnessed *(Maracot* 309).

This repulsive triumph over a feminized nature is the crowning achievement of the phallic investigator, the supreme embodiment of research excellence – "Challenger the super-scientist, Challenger the arch-pioneer, Challenger the first man of all men whom Mother Earth had been compelled to recognize" *(Maracot* 309-10) – and on the site, reports the awestruck Peerless Jones, the Royal Society have, appropriately, erected an obelisk.

The decades that have passed since Conan Doyle wrote "When the World Screamed" have provided enough instances of what irresponsible or reckless scientific experts, however disinterested, can do to the natural world if unchecked by the humane consideration and commonsense thoughtfulness we might associate with the plodding and prosaic Watson rather than the mercurial and dangerous Holmes and Challenger. But if this late Challenger tale is prophetic, it is also entirely consistent

with Conan Doyle's earlier objections to a ruthless pursuit of scientific discovery, a battening on the prizes of knowledge without counting or estimating their cost, and the unchecked arrogance of experts. Conan Doyle was himself proud to be a trained scientific investigator. The penultimate Challenger story is perhaps the extreme version in his fiction of the myth of the dark investigator, the story of what can happen if scientific knowledge is pursued without proper and humane thought about its context and consequences. As such, a strand of fictional genetic material twists back from the drill that penetrated the earth eight miles beneath the Sussex Downs, to the wounding insensitivity of a man showing off what knowledge he can produce from an investigation of his friend's pocket watch.

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