

CURRICULUM VITAE / RÉSUMÉ. Ms HELEN GAVAGHAN 2022. BRITISH/UK CITIZEN. INTERNATIONAL EXPERIENCE.

Currently based primarily at 165 Longfellow Court, Mytholmroyd, Hebden Bridge, W. Yorks. HX7 5LG.

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I am also on Linked IN, Facebook, Instagram, and You Tube to explore how they might integrate into the editorial output from and promotion of @SciPePolitics. **Sole tradership website. <https://www.gavaghancommunications.com>**

26th July 2022. Summary

1. Experienced editor, journalist, and science writer. General with specialty in science and technology in political and policy contexts. Post graduate academic experience (University of Manchester, CHSTM, 2002-2004), PhD/post doc *equivalence* gained professionally in the history of science in the geopolitical setting of the mid- to second half of 20th century via my original research in history of science and technology, paid for by grant and contract for publication.

I should not be addressed as Dr.

2. Founding editor/publisher of *Science, People & Politics* (ISSN 1751598x) and *In Our World* (ISSN 26341794). See <https://www.sciencepeopleandpolitics.com> & <https://www.gavaghancommunications.com/iow.html>.
3. Executive director of the Science, People and Politics Ltd. Co. No. 0590-1911 (dormant and limited by shares).
4. I create science or technology-based illustrations and infographics.
5. Experience with remote working.
6. I code and manage the two websites above, working with HTML/CSS and metatags, with basic knowledge of XML, and awareness of PHP, htaccess, SQL, JavaScript, and SEO.
7. When not engaged on behalf of *Science, People & Politics*, I am a freelance journalist, editor, science writer and author.

I have lived in and worked from London (11 years), Eindhoven (3 months), Washington DC (6 years), Leeds (4 years) - while I was at university - and the Calder Valley in the north of England. I have travelled extensively for journalism and book research, enjoy travel, and can move to a new location with ease, or work remotely, which I did first via access to the BioMedCentral server circa 2000-04.

In 2020, from mid-March, I interrupted my Court reporting after 8 years because of my then contact with someone overly susceptible to Sars-Cov2. I continued my other work as a journalist, editor, and publisher, and changed website content from one server to another.

AWARDS, GRANTS OR GRANT EQUIVALENT

2020. Travel award from the Association of British Science Writers to attend the 2020 European Investigative Journalists' conference. Covid 19 restrictions meant the conference could not go ahead, so I returned the grant. My interest is in the intersection between the UK criminal justice system and Mental Health Act.

2019. Grant from Hungarian Academy of Science to attend the World Science Forum in Budapest.
See. <http://www.sciencepeopleandpolitics.com/spppdfs/spp42019.pdf> pp 5-9.

2019. Registration for the World Federation of Science Journalists (2019) in Lausanne.
<http://www.sciencepeopleandpolitics.com/spppdfs/spp32019.pdf> *Climate change action gap*. P 14.

EARLIER INTERNATIONAL AWARDS, CONTRACTS AND BOOKS.

Alfred P Sloan Foundation (New York) award of \$125,000.00 (1991). \$100,000 was for research and writing. I had \$25,000 to draw on for expenses. My book (*Something New Under the Sun: Satellites and the Beginning of the Space Age*) was published in 1997 (Springer Verlag. New York). I assert PhD *equivalence* in the right setting for the work on the grounds of epistemology quality and because I developed a thesis from original research. My thesis being that each field of *civilian* application satellites (weather, navigation, and communication) in the 1950s and 60s traces its development to one of the twelve science and technology areas of the International Geophysical Year of 1957-58. That analysis does not mean significant defence, political and commercial interests were not at the time powerful players in the field of application satellite development.

My work brought new material to the published literature, as noted in a review in *Nature*. I wrote and sourced from a journalist's perspective undertaking research in US corporate and US government archives; reading at the Library of Congress; collecting anecdotes from those who responded to an advert; travelling to interview on tape in California, New Mexico, Wisconsin, Rhode Island, Washington DC, and Maryland many of the principles in industry; collecting copies of personal records, which principles had kept. I worked with keen and informed awareness of antitrust and defence technology issues and their interrelatedness. These taped interviews are available to an international history of science archive which has appropriate legal expertise.

I researched and wrote the first official history of EUMETSAT, based on privileged access to documents not then in the public domain. Audience: high-level decision makers in Europe.

EDUCATION

POST GRAD. M.PHIL. STUDIES 2002-2004. CHSTM, UNIVERSITY OF MANCHESTER.

Thesis unsubmitted: Topic. The impact of Sydney Chapman and Lloyd Berkner on the International Geophysical Year of 1957-1958.

I was exploring how the IGY sciences might have helped to reduce global tension by giving scientific insight into natural phenomena, such as those related to electromagnetism and seismology. Understanding those natural phenomena seemed to my mind important for not confusing observation with the consequences of nuclear testing, warfare, military, and missile deployment or use in the Arctic and Antarctic. Natural phenomena in the Arctic and Antarctic were critical inputs to the emerging scientific thinking of the time of such topics and others, like meteorology. I could see from my reporting of arms control how arms control might trace its history back to that era. I was hypothesising that the nature and life and interests and professional work of Chapman and Berkner kept the IGY with a civilian focus, and that that was hard to do given the military significance of every branch of the IGY. My research was also uncovering commercial and

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territorial pressures on the IGY. I had discussed with my research supervisor exploring whether there might be informal links between the IGY and Pugwash. I saw a theme of striving for scientific syntheses in each IGY area. All IGY areas were exploring topics as a global whole. The mindset of science, in the days before the theory of plate tectonics was known, echoed the theme of emergence of new Intergovernmental international organisations post-WWII, or vice versa. I had mentioned to seminar leaders my interest in the Zeitgeist of an era and the importance in history of periodisation. Fellow doctoral students were researching the history of mapping, entomology, and atomic physics, among other topics, and the humanitarian setting in time and place. This was a vibrant international intellectual environment. The first chapter of my thesis in progress set my work against emergence from decolonisation of a binary hegemony internationally. I was writing a transfer report from M.Phil. to Ph.D. when a dispute arose in March 2004 with my head of department (Prof M. Worboys, then director of CHSTM) about an administrative, non-financial, non-academic matter. I had a lot of respect for my research supervisor, the late Dr Jeff Hughes.

Biophysics BSc (hons). University of Leeds 1976-80. Head of Dept. Prof ACT North (Astbury Department of Biophysics). This is a biological sciences degree with degree-level subsidiaries in chemistry (organic, inorganic, and physical), maths, a tiny bit of FORTRAN programming, physics, and physiology (semester). My year-4 project: - Electron microscopy & plant tissue. Supervisor Dr Brenda Nelmes. I was secretary and then president of the University of Leeds student biophysics society. The degree focus was the structure and function of biological macromolecules *in situ* and biological contexts. This meant understanding the impact of physics on biological tissue, for example radiation. We worked for the most part with animals and plants, and applied physics to analysis of biological tissue, down to molecular level and up from atomic level. Inevitably, protocols for tissue isolation and extraction relied on knowledge of physiology, anatomy, and biochemistry. I did not (and do not) oppose limited experiments on animals, and think institutional review boards are crucial to ensure ethical research with minimal, preferably non-existent, pain and distress, but I did refuse to participate if a protocol or technique required me to take an animal's life when I could argue there was no ethical need (in physiology, for example, when I did not need to learn the technique of pithing a frog to complete the semester successfully). An experienced lab technician, not me, killed the animals I worked with.

Secondary education at St Joseph's College, Bradford. Junior School St Joseph's Todmorden.

A-levels (4): Physics, chemistry, biology, general studies (language option French). One year of maths A Level (pure and applied), with non-public exams passed. I withdrew from the fifth A level because *my* circumstances had changed.

Father died unexpectedly in 1974.

O-levels (1973) (10): Math, Physics, Chemistry, Biology, English lang., English lit., French, Latin, History (top grade), Scripture. One year of Spanish, with internal exams passed, no public exam. Grades 1-8 Speech and drama. Distinction grade 6.

School non-academic achievements.

Chess captain, Bradford Girls Chess Champion. I stopped playing chess when I was eighteen. Elected deputy head girl. Public performances at drama festivals and as member of "The Troubadours" in Bradford. Hobbies: - reading, theatre, Music.

VOCATIONAL TRAINING AND CONTINUING PROFESSIONAL DEVELOPMENT

Journalism training on the job (on staffs) and on release at The London College of Printing (1981), now subsumed into a university. Jobbing newspaper and magazine journalists taught the course. News & current affairs 1995 or 96, sponsored by the BBC after contributing news and despatches to the BBC World Service from Washington DC. HMRC and Business link courses about becoming a director, sole trader accounts, VAT reporting and other modules. About one hundred hours plus. Calderdale College for Clait Level 1. About 90 hours (passed exam and got a certificate). Basic html coding, and website design. I did not enter an exam, simply applied knowledge in my own business. Finance for non-financial managers delivered by Bradford University (one or two weeks), taught by Iain Ward-Campbell. Marketing, one term at the University of Bradford Management School. No exam taken. I left the course halfway through because I could not then afford the modest fee. SAGE entry for non-accountants – two (?) days [check with University of Bradford]. I ended up "creating" supply companies during our practical work to balance the books. It might be better not to employ me for this role! Though as a journalist I was totally fascinated, hence my playing with the software to explore creating interconnected companies.

WORK AFTER GRADUATION

On staff 1980-1983. *Building Services and Environmental Engineer, Electrical Times, Electrical Review, Electrical Review International.*

I worked on Electrical Review International for the three months prior to its launch, commissioning and setting up the first three issues on behalf of the editor, who was not available during that time. Roles across all editorial jobs 1980-1983: assistant editor, columnist, news reporter, feature writer and *de facto* acting deputy editor of a new launch while the editor was ill. Tasks from 1980-1983 included reporting, writing, editing, and commissioning. Audience: industry and corporate. Technical writer in The Netherlands.

On staff *New Scientist*. 1984 to 1991. Roles: Technology News editor 3.5 years (including the patents page). Tasks as a section editor: commissioning, editing, news writing, consulting with other sections, namely the subs desk, the art department, layout, and picture research, passing section for press prior to the editor. Then promoted to technology free-roving correspondent with two spells as Washington DC correspondent. 7 years in total at *New Scientist*. I reported nationally and internationally, including hard news. A couple of spots as acting New Editor. Audience: the public.

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1991 to 1996: Freelance, based in Washington DC.

Audiences. The public and/or international scientific community. Main outlets: *Nature*, *Nature Medicine*, BBC World Service and *New Scientist*, *The Scientist*, *Biofutur* (French), *Le Journal International de Medecin* (audience: French GPs). I was also researching and writing my first book. I was on retainer as the biomedical research policy correspondent for *Nature* in Washington DC. While freelance in the US, I had an I-Visa, permitting me to live in the US while working for publications outside the US. The terms of my I-Visa were why I wrote only one item for a US publication during that time. Resident in the US for tax purposes with valid US SSN.

1996-1997. Editor of *Clinica*, a weekly newsletter, with daily database output for the international clinical devices and diagnostics field. We worked internationally. I updated production from cut and paste, restructured the editorial workflow to provide clearer division between newsletter sections, with the intent of making it easier to prevent content manipulation or libel by imputation deriving from inadvertent content juxtaposition. My aim was to strengthen the hand of the editors of the different sections who reported to me (regulatory affairs, company news, science news, and sector news). I initiated a move for the editorial office to a new space, giving the editors reporting to me more space and privacy from myself and the chief sub. I initiated formal weekly news meetings. In addition to passing the publication for press, I consulted with advertising, sales, marketing, training and recruitment, production, and recruited staff, introducing a new role of chief sub for the newsletter, recruiting from Fleet Street. I was on the circulation list for the management accounts and publishing sales figures. I was responsible to the General Manager, and had easy access to, independently, both the publisher and the company secretary. I was responsible for developing the publication's budget. I had initiated a redesign when I moved on.

1997 to date freelance journalist and editor either part or full time, writing and editing for the public and/or international scientific community. For example, acting book review editor at *Nature*, as maternity-leave cover, commissioning and editing reviews. Contributed to a space and satellites encyclopaedia. Travelled extensively internationally to conferences and for reporting purposes.

2002-2004 part time freelance, while a part time M.Phil. postgrad.

2005 to date freelance and founding editor of *Science, People & Politics* ISSN 1751-598X. Founder and executive director of Science, People and Politics Ltd. Co No 1751-598X. I have been exploring the publishing and editorial landscape and its interaction with repositories and primary and secondary Royalties and the interface with academia, and looking for a business structure for generating profit, given we are not capitalised save by what we create and books which temporarily the company owned. Over the years I have contributed occasional items to UK national newspapers.

Topics I have covered as a journalist: trade, company news, appointments, product launches, production updates, marketing strategies, company sell-offs (eg Rolls Royce), defence, arms control, science, technology, biomedicine/biotechnology (rarely do I write about clinical work) and its policy, space, aerospace, energy, environment, UK criminal cases in Crown Court, patents and patent cases.

Journalism roles. Routine reporting, hard news journalism, investigative journalism, subject correspondent (technology, biomedical research policy), foreign correspondent (in US for a UK publication, in US for a French publication, in UK for a French publication), book reviews, columnist (in the giddy world of electromagnetic induction, a topic described here by MIT <https://web.mit.edu/kirtley/binlustuff/literature/electric%20machine/InductionMachineHandbook.pdf>), and writing informed opinion as editorials.

Editor roles. The editor, manuscript editor @SciPePolitics, assistant editor, deputy editor, section editor, commissioning editor, working with quarterly, monthly, weekly, and daily output - in print and online. In other words, I understand the differences between journalism and academic writing.

OTHER PUBLICATIONS/CONSULTANCY.

Contributed a rockets and satellites section to a childrens' encyclopaedia of space. Consultant in 1980s to electronics dictionary. Contributed to book on energy arising from articles in *New Scientist*. Consultant to Science Museum London on one of its galleries. Advice to a BBC 4 documentary on satellites. Grant reviewer twice. Each grant significantly exceeded £100,000. I have undertaken science writing for public relations for ESA and others.

TRADE UNION AND PROFESSIONAL MEMBERSHIPS

Currently a member of the Chartered Institute of Journalists and of the Associations of British Science Writers. Resigned from the NUJ on a matter of policy disagreement. In the NUJ I have been mother-of-chapel (a shop steward), asst branch sec. responsible for minutes and correspondence, and I ran to be deputy general secretary of the NUJ. I lost, and subsequently I resigned as per mentioned above, but not because I lost. I retain respect and friendship for the NUJ. That last comment is not window dressing hiding a dispute of any kind.

I have worked under contract or freelance for WHO, UNESCO, ESA, and EUMETSAT. Publications I have in the past written for occasionally: *Telecommunications Development Asia Pacific*, *Hospital Imaging and Radiology Europe*.

VOLUNTEER WORK

A) Voluntary work via various Roman Catholic institutions. Visiting elderly to do shopping [Leeds, while I was at university]. Teaching science element of GED [Washington DC].

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B) Voluntary work, not via an RC institution. Teenage mentor at Todmorden High School (2 years), Samaritan (3 years. Long since stopped being a Samaritan). Volunteer at Square Chapel Centre for the Arts and at Orange Box, with youths (10 years+).

Current volunteer work with eDBS. As required, I keep the original eDBS certificate safe.

IT EXPERIENCE AND REMOTE WORKING.

Working with remote access to BioMedCentral (now subsumed into a larger publishing group) servers early noughties as news editor (maternity cover). I have HTML AND CSS coding experience. See www.sciencepeopleandpolitics.com and www.gavaghancommunications.com

CORPORATE AND ENTREPRENEURIAL

I founded the magazine *Science, People & Politics* ISSN: 1751-598X (online) and its owning company Science, People and Politics Ltd. I am the company's majority shareholder, its executive director and editor of the magazine. On April 8th I founded the title *In Our World*, ISSN: 2634-1794 (online). Temporarily, I created a limited partnership (Applebough LP) and was the General Partner. I was, and am, exploring viable editorial niches in and from a manageable geographical region, in a manner which can be profitable. I have been seeking a structure compatible with GDPR legislation and ICO registration for separate entities. I dissolved the LP after submitting a couple of null returns to HMRC. I am the data controller for my unincorporated sole tradership, Gavaghan Communications, through which I work as journalist and writer, as well as a publisher. Hence my exploration of an LP, to create two ICO registrations reflecting the different tasks of copy production (selling services) and publishing (selling product). Not allowed!

ARMY

In my first terms at The University of Leeds I was a member of the Officer's Training Corps, and I wore my army uniform, including combat gear, with pride. I was not good on the parade ground, and left, but I was not running away, and I meant it when I joined.

WORK FROM AGE 16 UNTIL GRADUATION, WHILE AT SCHOOL AND UNIVERSITY

Cleaned up after piece workers in a factory, packing eggs, shop work, bar work, playgroup work for Calderdale Metropolitan Borough Council (all in Hebden Bridge), waiter, and hotel cleaner in Wales, housekeeper in a hotel, filing for HMRC in Bradford.

OTHER NON-GRADUATE PAID WORK. Data-entry for a barrister and occasional jurist, cleaning for a different barrister (both in civil law).

Cleaning. Artists' model (clothed!) at The Square Chapel Centre for the Arts in Halifax. Meet and greet work for an arts festival throughout the Calder Valley for Square Chapel Centre for the Arts.

LANGUAGES.

See CV above. Post retirement goals include studying French, German, drawing for pleasure, and art appreciation.

UK MANUAL DRIVING LICENCE.

A consultant neurologist has diagnosed me with MS. The sole mild symptom I experience has not altered in severity since 2006. DVLA notified, no added restriction to type of vehicle driven. The condition seems mild. Condition monitored by GP.

I anticipate being full time in the work force until 2027. I remain willing and able to relocate nationally or internationally.