Interview with Julian Tudor Hart
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Interviewer: Fitzhugh Mullan

Mullan: I'm with Julian and Mary Tudor Hart, in the living room of their home. Dr. Tudor Hart had a story he was going to recount, but then I want to crank back to the beginning and start talking about you in a much earlier time. Why don't you give me your story.

Hart: The story is that John Frey, (now a professor at Madison) when he was planning to come over here, had never worked in the National Health Service (NHS), I can't remember, I think he visited us first or rang us up or wrote or something. Anyway, he already knew that the time available for doctor-patient interviews is much shorter in this country than it was in America, or least in American teaching hospitals. He told his colleagues that he was going to a country where they only had fifteen minutes for the average doctor-patient consultation. Of course, that was rubbish; the general average in this country at that time was about five minutes, and the average in the United States on the latest data we have (objective measurements, not asking people what they do, but observing them doing it) is about fifteen minutes.

Anyway, all his colleagues threw up their hands in horror and said it was absolutely impossible to deliver good clinical medicine in fifteen-minute intervals. When he went back after his six months here said, "No, you really can do it. Not only can you do it, but you can do it a damn sight better because you know the people and you're building up a cumulative story." He

said this was the most dramatic shift. It was more important for him than the fact that there wasn't any billing. I think that's true, too.

Mullan: Let me, if I could, go back to the beginning. In this exercise of oral history, what I'd like to do is spend a little time talking about you and how you got into medicine, what influenced you, and then the path you took through medicine. So tell me a little bit about where you grew up and how you progressed through life prior to medicine.

Hart: Well, you'll have to apply your own censorship to this. My parents split up when I was three years old and just before my sister was born, so I grew up in a single-parent family with a mother who was a doctor, which was quite unusual in those days. I'm talking about 1927. My father, Alex, also became a doctor, qualifying as a mature student, having previously been an economist.

My mother, Dr. Alison Macbeth, worked for a big drug company, Organon Laboratories, which had some educational effect on me, because I did realize fairly early on that she believed in all the drugs that were produced by her company and didn't believe in any of the drugs that were produced by other companies. As she was a very intelligent, honest, critical, and self-critical woman, I could see the power of self-deception associated with how you got your bread.

My father was a big Communist, and he first of all worked in South Wales quite near here, in Llanelli. It was a big center of the tin-plate industry and the coal industry. He came down here

during a trade-union dispute. The British Medical Association (BMA) was in dispute with the miners about the pay for the doctors who provided medical services for the miners. It was quite a complex dispute; it mainly revolved not around primary care, but around hospital surgery. There was a cottage hospital there, and my father was well qualified in orthopedic surgery. He'd studied with Böhler in Vienna, who was a world name in orthopedics, a great admirer of Hitler, but actually a very able clinician.

So he went down to Llanelli and provided very high-quality care, but really as sort of a blackleg. What do you call them? What do you call blacklegs, Mary? The American word that everybody uses now.

Mullan: Skinhead?

Hart: Scab. He provided scab labor, really. At that time, I think most people thought in terms of a sort of class division between doctors and patients, where doctors were the exploiters and the patients were the exploited. I would regard that as a quite false opposition now.

Anyway, then he went off to Spain with the International Brigade and was a surgeon with them until Franco won the war. Then after a very brief interruption, he was right through the Second World War in North Africa and Italy.

Mullan: In the British Army?

Hart: In the British Army, yes, as a surgeon. Important for me, because I had very little contact with him, so he was able to develop as a role model I admired from afar without ever being corrected by actually living with him. [Laughter] He was not a very practical person, really.

Mullan: Were his Communist politics active?

Hart: Oh, very. Yes, he was very active. I was evacuated to Canada in June 1940. At that time it looked as though the Germans would probably win the war, and that was the view of most informed people. I think it's important for people to realize now, when they look back on the outcomes of all wars and regard them all as inevitable. That is not how it appears at the time, nor is it how it was. It was touch and go whether Hitler would negotiate a separate peace with Great Britain, make a settlement with America, and there were plenty of people quite willing to take over the American government instead of Franklin [D.] Roosevelt, who would have followed entirely opposite policies.

Being in Canada as an enforced noncombatant, although I was only thirteen when I went out there, when you're in that situation, you think that if people are dropping bombs on you, then you're participating in the war, whereas if they're not dropping bombs on you, you're not a combatant; you're not doing anything. So I felt very guilty out there that I was not sharing in an experience that was being imposed on everyone else, which I thought, you know, if you belonged to a country, your job is to be there. That was a feeling very generally shared by

practically all the evacuees I've ever met to North America; they all felt that.

Mullan: This was as you grew older and became more of age?

Hart: No, even at thirteen, I thought--you've got to understand I came from a very political family. I mean, while my father was in Spain, if I read most British newspapers or listened to most British politics--Winston Churchill, for example--Franco was a gallant Christian gentleman and so on, as he indeed was reconsecrated by post-war American governments. As far as I was concerned, the war began in 1932 with the Japanese occupation of Manchuria, and never stopped until 1945. It was a very long war. So I was in one of these prematurely anti-fascist families, and you read the newspapers in that special way that you do when you only half believe what you read, you know, and try to work out the truth.

It's important for my choice of career and all the rest of it, because while I was in Canada, there was a period from about 1940 'till 1944 when apart from the air bombardment of Germany, which none of us realized at the time was so ineffective as it actually was, terribly destructive but not very effective in its securing its objectives, apart from that, we just weren't doing anything.

It was the Russians that were keeping us in the war; it was the Russians who were winning the war. I became a Russophile and started reading [Karl] Marx and so on and got very serious about it. I read most of the major works while I was at school and found Marx's ideas very useful, that they had great explanatory

power. I'm talking now about really fundamental Marxist ideas, not the sort of superficial ideas that most people talk about. It wasn't a question of whether you had revolutions or not; it was the idea that the way you analyze a situation is to look first of all at production and what social relations of production are, how people relate to one another in their work, in producing value, that the essential injustice of society doesn't arise from unequal distribution of value; it arises from unequal and misdirected investment and how value is actually produced. All the other things are consequences of that. The concept of alienation of people from their work, I really understood that, I think, rather early; that this was an absolutely central idea.

I didn't like myself at all at school. I wasn't very popular; I wanted to be popular.

Mullan: Where were you?

Hart: I was at a boarding school near Toronto. I lived in Quebec with my very wealthy grandfather. He was an artist who had married a Canadian.

Mullan: Your mother's father or father's father?

Hart: My father's father.

Mullan: And your mother stayed in the UK during the war?

Hart: Yes. I couldn't catch a ball, throw a ball, kick a ball, or do anything with balls, really, and that was absolutely central to popularity, at least as far as I could see. Altogether I felt myself rather a social failure, which I think I probably was.

I wanted to be useful in the world, and I went through a period of thinking that if you were a doctor, you just couldn't help being useful, because doctors were, by definition, people who made the sick well and so on. My picture of doctors was based entirely on my own parents. The only times I actually met a real doctor, fractures and things like that that I actually got while I was at school, seemed to have made no impression on me. I thought they were just exceptions. I've learned since then that this was quite normal that they never listened to patients and were desperately trying to fit you into whatever Procrustean bed they'd chosen for their diagnosis.

Anyhow, I came back to England in 1945, raring to go, to get into medical school and be a doctor and become a sort of "red doctor," a tribune of the people, a GP [general practitioner] in a locality where I would be a sort of political-missionary doctor rather like A.J. Cronin's character in the Citadel.

My parents were both horrified at this idea, my mother particularly, who said that medicine was much too hard work, that you never got a decent night's sleep, that if you had any conscience at all, you wouldn't make much money, and that altogether there were a lot of other much more exciting, interesting things to do than medicine. I tried to think of what these other things would be, and I thought, "I have to be useful." Engineers are useful, I thought, or perhaps going to

the Foreign Service, that's useful, because it was clear we were getting ready for another war, and I thought if I went in the Foreign Service, I could stop that happening. Absolutely ridiculous childish ideas, so even I could see how stupid they were. I mean, how can you be an engineer if you're not very good at mathematics? And what's the point of going to the Foreign Service when it's run by people who had only just stopped thinking that Hitler and Mussolini were really quite good chaps?

So I decided I'd been right the first time. I decided to disagree with my parents, got into medical school, and from then on I really always wanted to be a GP. I wanted to be a good GP. We were taught very much that GPs were not good, that they were clinically incompetent, and I thought, well, in the country of the blind the one-eyed man is king. Even though I didn't think I was all that marvelous, I knew I was quite a good student, and I thought it would be much more interesting and exciting and much more what I wanted to do to be a GP. This was a very unusual attitude to have at that time. The only people who really wanted to go into general practice, with rare exceptions, were people who thought that much less effort was required or their dad was a GP, and he seemed to be making quite a lot of money, so they could join the family business. But otherwise, very, very few people wanted to.

When I talked to people like Donald Irvine and Marshall Marinker and Paul Freeling and John Horder and all the other founding fathers of British general practice, we all had in common that we had always intended, when we were in medical school, to be GPs. None of us were people who'd aimed at

something else and then moved over to general practice, which I think is a different trajectory from a number of other cultures.

It's quite striking how in Spain, for example, when they had to reinvent general practice after 1975, they didn't have any role models at all who actually were GPs, I can think of two cardiologists in Catalonia who both moved out of being specialists into being GPs because they had learned from experience that primary care was more important, that there were plenty of people who could do good work as specialists in hospitals, whereas it was very difficult to find anybody who was doing good work in primary care. So they moved into that area, and I think that's true of quite a lot of countries that don't have the plebeian GP tradition that we have in this country.

Mullan: Which years were you in school and which school?

Hart: I was first at Cambridge for two years. I did a short course because I'd been in the Army for a short time. I was invalided out with a fractured spine, which gave me experience as a patient, very, very useful.

Mullan: Was that from an accident?

Hart: It actually goes back to this not-very-good doctor that I had met when I was at school. I worked on a farm during the war, when labor was very short. During the school holidays, doing very heavy work indeed. I was very lightly built. While I was pitchforking, with a huge load of hay on the end of a fork. You can get a huge load on the end of a hay fork, because you can

balance it. The weight goes down through your whole body, you know. But if you get a little bit of tilt on it, suddenly all hell breaks loose, and that was what happened with me. I heard a crunch and felt something go in my back. I knew that I had fractured a bone. Ever since then I've known that one of the cardinal signs of a fracture is that you hear the bone breaking, and I always ask patients, "Did you hear the bone break?" It's quite a useful guide.

I went to this GP. It was quite near the school that I went to; he was the school GP. I said, "I've fractured my spine. Can you help me?" [Laughter] And he took one look at me and made an end-of-the-bed diagnosis that it was because I was a weakling trying to do too-heavy work and that obviously I'd pulled a muscle. So he said at all costs I must not stop working, I must continue, that he would give me treatments twice a week with his infrared ray machine, these ridiculous things they used to have. He did that, but I had to go back and just bash on. The pain was terrible, but I survived it. I was fifteen years old then.

I forgot all about it, and then in 1946, I had a medical examination going into the Army. We all queued up in the November weather outside, stripped to the waist, gradually worked our way into an office in which there was an officer and a sergeant sitting at a table, and people were walking past them, stripped to the waist. The officer was doing the *Times* crossword puzzle and never looked up at any of the patients or apparently played any part in what was happening at all. The sergeant was asking all these men something and they were answering, and then they were going out through another door and, as I believed, all sorts of tests would be done.

So anyway, eventually I reached this sergeant. He'd got this form in front of him with all the names, and he said, "You feeling all right?"

And I said, "Yes, thank you."

So he ticked "A1" opposite my name and he said, "All right, go out there and get dressed." So I went into the next room, got dressed, and that was the end of my examination. Well, they'd never looked at my spine, which had a kyphus in it from this compression fracture.

Then when I did battle courses during my primary training, I got pains in my back like everybody else, but unlike everybody else, I had this kyphus. My mother, being a doctor, worried about it and thought perhaps I'd got Pott's Disease (tuberculosis of the spine) which was quite common in those days.

So they put me in a hospital. By then the war was finished and I could see the Army was no place for anybody who wanted to use their head about anything. So I didn't mind being in the hospital at first. They told me I was going to be in the hospital for five years, lying in bed, because that was then the treatment of tuberculosis of the spine. Anti-tuberculosis antibiotics didn't exist. But at eighteen, you accept just about anything, whatever you're told.

What I did learn during that six months was that half the time the doctors didn't know, but they would never admit that they didn't know, they fumbled about, they talked their secret language across the bed, of which I understood more than they thought I did. Eventually, the penny dropped with me that I probably hadn't got tuberculosis of the spine, that it would probably not be too bad to be out of the Army rather than in it.

So I began remembering this episode in Canada, but I didn't say anything about it. I thought it was up to them to work it out that it's an old fracture. One of them did say at one point, "I wonder if it could be an old fracture," and I just didn't say anything.

So anyway, I got out of the Army, and that helped to pay for my education, because we had a sort of G.I. Bill of Rights as well; not quite as good.

Mullan: So you went to Cambridge for two years?

Hart: Yes, for a short course for two years. Then to St. George's, a very bad medical school. At medical school there was absolutely no teaching from the point of view of primary care, the teaching was actually against primary care. Insofar as there was any real teaching, it was by professors of medicine trying to turn people into professors of medicine. I got a bit of that, and I enjoyed clinical medicine.

I left medical school with the belief that the job of a good GP was to practice first-class hospital medicine in the quite different conditions of people's homes and ordinary doctors' offices. I wanted to work in a poor district. I wanted to work in a mining district, actually.

I had got married while I was a student, hastily and stupidly, a disastrous marriage from both people's points of view. My then-wife, having been full of enthusiasm about going to work in a mining area when we married, within six months she'd had second thoughts about all that.

After much too little hospital experience, I was offered a partnership in a slum practice in North Kensington, in London, in a very poor area. Around Portobello Road with a lot of criminals who were nice people; I mean, big kinship networks and so on, sort of mafiosi kind of people. Good people to get along with, very good patients, but crooked.

Mullan: What ethnicity?

Hart: English at that time. There's been a big influx of Afro-Caribbean since then. I was there for five years.

Mullan: At this point in time, was there postgraduate training for clinical practice?

Hart: No, there wasn't any. There was a trainee scheme, but it was an apprenticeship scheme without any educational element in it at all. The idea was just that you learned from the guy who was employing you, but in fact, it was just used as a source of cheap labor. At that time it was very difficult to get into practice.

Mullan: St. George's, the course of study there was how many years?

Hart: Three clinical years.

Mullan: It was at that point, then, that you went to the practice?

Hart: No, I did a six months' house physician's job in a peripheral hospital, Kettering Hospital. I didn't want a job in a teaching hospital. The okay thing to do if you wanted a big career was to stay at all costs in a teaching hospital. I didn't even apply for such a job. I thought I'd get a lot more experience if I went to a peripheral hospital, which was true, but on the other hand, I really hadn't taken account of how much experience I'd get. It was being thrown in the deep end and learning to swim, not at my own expense, but at the expense of patients.

I had two twenty-bed wards (forty beds altogether) of acute adult patients and fifteen acute children. All the beds were full all the time. Quite often we had beds down the corridor or down the center of the ward. I never refused anyone unless we were absolutely bursting, and had a lot of fights with my consultant because he was always wanting to keep people out; he didn't like taking people in with strokes or more or less terminal respiratory failure and that kind of thing, which he described as "rubbish."

So I had very intensive experience for six months, but no time even to read a book. I mean, it was awful. We had only just started being paid. I was paid about 500 pounds a year at that time, as far as I remember. Before that it had been nothing; you just got your keep. You didn't have any official time off at all; you had to grovel to your boss and say, "Do you think I could have next weekend off, sir?" And if he was in a good mood, he'd say, "Well, if you can fix it with one of your colleagues, yes." But then you had to go groveling to one of the other housemen.

Mullan: This was what year?

Hart: That would be 1952-'53. Then I got a job as a registrar at Watford Chest Clinic, looking after people mainly with tuberculosis, but some with other respiratory disease which was far beyond my experience. I shouldn't have taken the job. But again it's an interesting anecdote that the consultant who asked me to do it, I happened to know him socially, he was desperate for somebody to replace a series of disastrous registrars they'd had. I said, "I can't do it. I'm not experienced." He said, "Yes, you'll do it fine. You'll do it far better than the man we just had. He's a drug addict and an alcoholic, so you're bound to be better than him," which was probably true.

But I had a very rich experience of having to do things that I was not competent to do. Mainly because the whole service was overstretched, I was looking after poor people all the time, and whenever you're looking after poor people, you find that the sort of things that ethical committees and professors of medical ethics keep fretting about all the time actually go through on the nod in real life all the time, to an extent that makes me quite impatient with a lot of these people. They seem to me not to see the real dimensions of things.

Anyway, I was in Notting Hill in North Kensington for five years, running actually quite a good practice, I think, by the standards of the time--proper records and so on--and certainly spending an awful lot more money on the practice and on staff than practically any of the other local GPs.

Mullan: This was while still entertaining the idea of going to a mining community?

Hart: Yes, I would have done that if I could. Anyway, by the end of the five years, that marriage was on its knees, it was really getting impossible. My surgery was in the basement of my house, and the fights going on in the house were interfering with the work in the surgery.

So I went back into hospital. I had a good reputation with the local hospitals, which included Hammersmith Hospital, Hammersmith Medical School, which at that time was the preeminent British postgraduate center. It was a very important center of excellence.

My big interest at that time was in pediatrics, and I decided to get out of general practice, really because I think this was all tied up with my personal problems. I thought I'd get myself trained as a pediatrician and go out to probably West Africa and work as a pediatrician. So Peter Tizzard, who later became the president of the British Pediatric Association, took me on as a houseman at Hammersmith, and after that I worked in junior hospitals for about two years. By the standards of the time, I actually got rather overqualified compared with most other GPs. It was all medical. I didn't do any surgical jobs at all.

At the end of that time, the charm of going to West Africa had rubbed off a bit, after I'd talked to people about what I'd actually be doing there. I remember meeting at Hammersmith a man who had just come back from West Africa. He'd been a nurse out there and had come back to become a doctor as a mature student.

He told me how he had gone again and again to a village in Northern Nigeria, where hookworm had been previously unknown. He was visiting a school where gradually more and more hookworm was appearing, and this was because they'd got earth floors on the toilets. The kids were being brought in from a huge catchment where very few people were having any education at all. Those few kids who were being educated were being drawn from a very, very wide area, and they were coming from small villages where there wasn't any hookworm, being centralized in this place with this earth floor, where they picked up hookworm and then they'd take it back to the villages.

He could see; he worked out the mathematics on this, and they were creating endemic hookworm on a colossal scale. When he went to the head of the school and said, "Look. We can stop this. All we have to do is provide a concrete floor in the boys' urinal and this whole business would stop." He not only had a big row over this, but, I think, lost his job, or anyway he was threatened. He decided then and there you had to be a doctor with an M.D. and have some authority so that you could tell half-wits like that, "Get a bag of cement and put the bloody stuff down. You don't have to have a meeting or a committee to decide."

Well, I'd seen enough decisions like that in my practice in North Kensington to realize that anything I'd got in West Africa I could find quite easily here, that it was essentially the same kind of problem. I'd been up against that sort of thing, too.

Among the people I knew when I was in practice in North Kensington were Richard Doll, because he was my patient and his family were my patients--Sir Richard Doll, now the doyen of

British epidemiology. He and Bradford Hill described the association of smoking with lung cancer more or less simultaneously with the old guy; I can't remember his name. Your surgeon general. Hammond, was it?

Mullan: No.

Hart: Hammond was one of the authors, anyway.

Mullan: Yes.

Hart: Something and Hammond.

Mullan: It will come to me.

Hart: Anyway, it doesn't matter. But Doll's is a huge name in British medicine. I'd had an interest in epidemiology anyway, partly because any Marxist who understands anything is an instinctive epidemiologist social-medicine person. But the epidemiological world at that time, the world of social medicine (and that's what it was called then, social medicine) was full of Communists, fellow travelers, and people who would be described by [Senator Joseph] McCarthy as "reds" anyway. They might or might not really be reds, but they were all tarred with the same brush.

So I knew Richard Doll politically and I worked with him for about six months, learning the trade in London. Then I was sent down to South Wales--I was mysteriously taken onto the staff of the Medical Research Council without any interviews or

applications or anything like that (that's the way things seemed to be done in those days) and joined Archie Cochrane's team at the Pneumoconiosis Research Unit in Cardiff, where I met Mary. Actually, Archie Cochrane was always an anti-Communist.

Mullan: Marxists are attracted to epidemiology, but not necessarily vice versa?

Hart: Oh, no. In those days, vice versa, too. In those days, it was a very suspect and subversive trend in medicine. I mean, you've got to remember how medicine was at that time dominated by the sort of people that were running the AMA; really bigoted, reactionary, wealthy old men, determined to protect their fief. It was all about turf and that sort of nonsense, absolutely not socially oriented. So anything with the word "social" in it was suspect.

Archie Cochrane had been in Spain as a medical student in the International Brigade with my father, so it was all part of the family.

Mullan: I thought you said he was an anti-Communist.

Hart: Yes, he was an anti-Communist. That's right, I was going to tell you my joke. There was a joke went around during the McCarthy time that came from America. There was this cop. He got this poor guy, a rather ineffectual-looking man with glasses perched on the end of his nose, and this large Irish American cop has got him by the collar with one hand, and with the other hand he's got the truncheon that he's just beating this guy over the

head with. The victim says, "But I'm an anti-Communist!" The cop says, "I don't care what kind of Communist you are." [Laughter] Well, that was Archie's fate, is that he was regarded as a red, although he was at most only pink.

Anyhow, Archie was a very, very good epidemiologist. He really invented response rates in the over 90 percent range. You have to realize that in the 1950s, American sociologists, who ruled the world on data collection, regarded a 60 percent response rate on studies as good. The fact that the 40 percent of nonrespondents were almost certain to be quite different from the 60 percent of respondents, and that you were therefore going to get grossly erroneous results, didn't seem to occur to them. People forget now that the Framingham Study started off with something like a 60 percent response rate; it was in the low sixties. So all the data we've got from the Framingham Study is based on a biased sample of population where almost certainly the 60-odd-percent of respondents were systematically whiter, wealthier, better educated, and had lower event rates (coronary event rates) than the remaining 30-odd-percent of non-respondents. If they had put more effort at that time into achieving 95 percent response or something like that, it would have been of enormous value in sharpening up that work.

That was a lesson that Archie had already learned, and his classical studies on tuberculosis and progressive massive fibrosis was really wonderful models. He set a standard of quality that nobody else had ever dared to approach. I worked in the Rhondda for about a year, in Archie's unit.

Mullan: What is it called? The Rhondda?

Hart: R-H-O-N-D-D-A. Famous. The two Rhondda Valleys between them, just before the First World War, were producing about 25 percent of the world's shipping coal, bunkering coal. I was doing a rather piffling study. When you're doing your first task, you have to do something that somebody else has thought of, not what you thought of, and I was very unsatisfied. I felt that the question that I was answering with the work I was doing was trivial. I could see big opportunities for much bigger questions to be answered, and particularly I objected to being in a role of a very skilled observer making meticulous measurements and observations on a generally very sick population that was not receiving proper medical care. I found it morally repugnant to have people you could see had got uncontrolled thyrotoxicosis for example; you could just see it, and nobody was doing anything about it. All I was allowed to do was write a letter to the GP and say, "I think your patient, So-and-so, might have thyrotoxicosis. I'm sure you've thought about this and will investigate it."

I did locums in the Rhondda to earn a bit more money, and there I saw what kind of care these people actually received. When I tell you that in one morning I saw sixty people personally, then I had twenty-five house calls to do, then I saw another sixty people in the evening, all you could do in those conditions was a kind of triage where you pulled out perhaps four or five patients in the morning and four or five in the evening, for whom you did some reasonable kind of a diagnostic job on; on all the others, you simply met expectations.

This is something that I find almost completely undocumented in the literature; the expectations of patients, whenever we're

short on resources, are what really dictate the level of service that's provided. If one doctor is seeing over 100 patients a day and he's deputizing for somebody doing the same thing, that's what patients are used to and they will more or less conform to that. They know perfectly well what the state of the market is, and they're not middle-class people in the English sense of the world. They're not educated college people who, regardless of how many other people are in as much need as they are, if not more, will just bang on the table and insist on having what they want. On the whole, industrial working-class people don't do that; they trim their expectations to reality.

So you can get away with murder. I mean, for example, in those circumstances, if you do a rectal examination, then patients shake your hand and thank you and apologize for having subjected you to such a humiliating experience as having to shove a finger up their ass and so on; they don't expect that. I mean, I'm talking about way back in the late fifties and early sixties. But still, that was the way things were here. The only American literature we have that's comparable, is Osler Peterson's study in South Carolina. There were almost simultaneously, I mean within a year or two of each other, there was a big study done in Canada and this one in South Carolina, and in the UK the Collings Report, all of them about 1950, '51, and all of them uniformly showed appallingly low clinical standards in general practice, judging it for example on when you ought to do a rectal examination, when errors are perfectly obvious.

So anyway, I suggested to Archie Cochrane that what we really ought to be doing was to develop a periphery of

excellence. If the way to develop clinical research in hospitals was to create a center of excellence that served a poor population, with a combination of state-of-the-art--medical care in return for being used for reading and research, then why not a.

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a center of excellence in Rhondda where we would have a primary care unit that offered people excellent care in return for participation in research.

Mullan: He was already established there in a practice?

Hart: It wasn't a practice; it was an epidemiological unit. It was a Medical Research Council unit. It was purely a research venture; it had nothing to do with treatment.

Mullan: The sixty patients in the morning and the twenty-five house calls--

Hart: That was when I was being a locum. I did locums in Rhondda. Rhondda is a big place. At that time it had a total population of about 120,000 or 130,000.

Mullan: So there were GPs functioning there, and Cochrane had a research unit.

Hart: That's right. The research unit wasn't attached to any practice. Coal miners, first of all, are civic-minded people, and if you suggested to them that there's going to be a big research venture looking into the association, if any, between tuberculosis and progressive massive fibrosis, which was the main theme of research there, then they would help you. I mean, they reckoned they would help themselves, too. It was a free-standing unit that had no relation to the National Health Service. I was suggesting to Archie that we should make it a combined clinical service unit and a research unit on the same lines as a teaching hospital, but it wouldn't be in a hospital, it would be in primary care.

Initially, he was very enthusiastic about this and thought it a wonderful idea, but the way he talked about it really put me off. He said, "Well, yes, of course what we'll do is we'll wait until there's a vacancy," which was happening all the time. These were old men, a lot of them. "We'll get you in and then you'll drive all these terrible old half-wits out of business. We'll expand your unit at the expense of these incompetent local GPs." Although in those days I still thought to some extent like that myself--I mean, I was very critical and I still am very critical of the clinical quality of a lot of GPs, actually a lot of doctors, but particularly GPs, I suppose--but I also think that there were a lot of neighborhood GPs who have lost their clinical competence because they were inappropriately trained in the first place, but who had enormous social skills. They knew people, they got on with them, they passed the time of day with them. This wasn't a matter of sentimentality; it's that they

recognized the social dimension to good care, which was not recognized in hospitals by most medical specialists.

Mullan: So you didn't like the idea that you were going to force them out.

Hart: No.

Mullan: Was that when Glyncorrwg came up as a possibility?

Hart: Yes. Also, Archie was a very dominant personality. We didn't really get on. I mean, we were good friends, but we were pulling in opposite directions, and he would have had his way, not me mine.

So when a vacancy came up in Glyncorrwg--

Mullan: How do you spell that?

Hart: G-L-Y-N-C-O-R-R-W-G, because W is a vowel in Welsh, not a consonant. My original idea was to get a population and develop it as a research population, to provide good clinical care myself, as good as I could, and to make this population available to epidemiologists, not to me, but to other people, to do research on, because at that time I kept hearing epidemiologists saying, "Oh, if only we had really cooperative GPs who understood what we were doing, what wonderful things we could do." I learned from bitter experience that this was absolutely not true. What the epidemiologists really wanted was an available population in which they were allowed to do what the hell they

liked, without having to negotiate it with anybody, and I wasn't willing to do that.

I felt that there had to be a fair exchange, that if you're asking people to take part in research, they must have a guarantee that they're also having state-of-the-art medicine and so on, and that you won't ask stupid questions. For example, when I was working with Archie, we had one essentially frivolous study looking at the relation of ABORh blood groups to progression of pneumoconiosis, which was based on absolutely nothing but current fashion. It didn't have a biological hypothesis behind it; it was that just at that particular time, when we'd found the association between duodenal ulcer and blood group O and what subsequently turned out to be secretor or non-secretor status for ABO antigens. A whole lot of people thought they had a cheap ticket to personal fame and the Nobel Prize by applying crude tests of association between blood groups and every disease you can name, without any biologically plausible hypothesis.

Mullan: It was just a fishing expedition.

Hart: That's right.

Mullan: Tell me about Glyncorrwg, how you got going there.

Hart: For the first five years, I didn't do any research at all. Mainly I was busy just surviving. It was terribly hard work in a population with extremely low expectations clinically but very high expectations regarding access to the doctor for you to sign

things and so on, a typical poor population. And also just settling into a completely new set-up of which I had no experience--getting married and so on.

But after about five years, I got my record system sorted out. I began keeping all the records of people who died; I didn't allow anything to go back to get pulped by the Health Authority. This has been a standing problem for British GP researchers, to persuade them that they'll never do any research worthy of the name if they don't retain all their records. If they systematically weed out people who died, then they don't have a representative population for anything; a simple idea that's actually very difficult to sell to people.

I had adopted from the very beginning the discipline that every single time I saw a patient, I always made a data entry in the records. I had already understood from my experience as a quasi- or apprentice epidemiologist that negative results were just as important as positive results. I wrote everything down. I was an obsessional recorder. I could be sure that if I wrote down CNS, this represented a standard set of diagnostic tests, for whatever they were worth. It did include so and so and it didn't include so and so. I had standard criteria for terms that I used and so on throughout all my records, and I have now got all my records microfiched, going back to about 1964.

Mullan: When did you start inventorying?

Hart: '61.

Mullan: Were you alone in terms of the practice?

Hart: Yes, I was alone. It was a single-handed practice and there wasn't anything else it could be; the population was too small. I didn't look for a larger practice partly from impatience and partly I don't think there was anybody else who would have had the same set of ideas.

In 1968, I suddenly got serious. That was really the beginning of everything. While I was in North Kensington, George Pickering had done his pioneer work at St. Mary's Hospital Medical School, looking at the natural history of blood pressure. He was the first person that looked at a whole population that was more or less randomly sampled. It was taken from the outpatients' attendance at St. Mary's, so it wasn't really a random natural population, but it was much closer to that than anybody else had ever had. He was the guy that started off the argument about whether blood pressure was a continuously distributed variable and a continuously distributed risk, or whether there were two kinds of people--nonhypertensive and hypertensive. There was a famous argument between him and Sir Harry Platt, who was a professor of medicine in Manchester. Platt maintained there were two populations: got it/not got it.

As a Marxist, I could see straight away what his argument was really about, and that's why it was so bitter: it was about how doctors earn their bread, because if you aren't allowed to categorize people as having or not having a disease, the whole basis of medical practice as a trade disappears, but human biology does not disappear. George Pickering was as much a human biologist as a clinician. He had spent his whole life up to that time researching the cause of hypertension as a category, but he saw from his own evidence that hypertension was simply a

description of the top end of the distribution. Where you put the division between normal tension and hypertension was determined by a balance between continuously distributed risks and benefits, a social as much as a biological division. I don't I don't think Pickering fully understood the implications of what he was saying.

Cochrane did understand it. He said that the division between "have it" and "not have it," which clinicians must have to have (I mean, you must have a decision point at which you intervene or don't intervene) was essentially historically and socially determined, it depended on the balance of advantage for the patient. If the evidence based on good trials was that the patient would gain from intervention, then, okay, they've got the disease. If they wouldn't benefit from the intervention, then for practical purposes they don't have the disease, because what we're talking about is labels. We're not talking about diseases as a separate entity. The whole concept of disease classification, a sort of bestiary of disease, a kind of parasite which, if you could get a rifle and you could aim accurately enough, you could shoot the disease and not hit the patient, the whole magic bullet idea, I felt had a kind of spurious validity for infectious disease, because it actually is true that bacteria do have a separate existence and cannot be separately targeted, but is generally not valid.

Even taking the classical case of infection, when Virchow wrote his M.D. thesis on typhus, long before the typhus rickettsia had been recognized or even hypothesized, he described just about everything about the disease, including its social determinants which were actually its main determinants, all about

lousy and non-lousy states and certain concentrations of population and so on, which were just as important as the rickettsia; they were just different components of the same chain of causation.

Mullan: If you were drawn to hypertension as a disease which could be studied, had an epidemiologic base, and had some fairly significant social issues underpinning its treatment.

Hart: Yes, all that's true, but I could see something else. I could see right from the very beginning that this was the opposite kind of disease to bacterial infections. Antibiotics were magic bullets. All sorts of illusions about the power of medicine were getting going on the back of penicillin and the subsequent antibiotics. I could see even then that there was going to be a next step after that, which was going to be about illnesses that were inside people, that were in sick organs, not infected organs, but cells that were not behaving as they ought to do. Shooting cancer without killing a patient is much more difficult than shooting bacteria without killing a patient. And treating diabetes without killing a patient is even more difficult. So we were more and more talking about disordered physiology and not about invaders.

It's very difficult not to think backwards. I mean, I'm sure I think more clearly about this sort of thing now than I did then. What I say now is that it isn't about invaders, it's about mutinies inside your body. It's much easier to think clearly now. But I could see that if you could get it right for detection and management of hypertension, you'd get it right for

a whole raft of other problems, continuing problems. I could see that in the late 1950s while I was still in practice in Nothing Hill.

I had a bus driver came in. I can't remember what he was complaining about, but whatever it was, it was nothing to do with blood pressure. I think essentially because I couldn't make out what was wrong with him, I measured his blood pressure as a part of general physical examination, which is something I rarely do. I don't believe that general physical examinations are particularly productive. I normally am hypothesis-testing, and I never had the time to do serious full examinations, only the kind of "full examination" you can do in one minute or two minutes, that you learn in the emergency room. It might just not as well not be performed, I think. I mean, if you're really serious about it, it's going to take a long time. So I don't believe in diagnostic fishing expeditions for patients.

But this guy, because I didn't know what was wrong, I did a fishing expedition. He'd got a diastolic pressure of 170, and he was about forty-five, something like that.

Mullan: Diastolic of 170?

Hart: Yes. That really made me think. He didn't have any complaints that related to hypertension, and his fundi were all right. I can't remember what happened to him, either. He was really my first alerting case. I started then looking systematically. I started measuring blood pressures of just about everybody that came up, and found several more monstrous diastolics--120, 130, that kind of thing.

This is in the very early days of anti-hypertension drugs. They were just shifting from those awful things that you have to inject and made people shoot themselves, ganglion-blockers and so on. It was just moving from them to methyldopa and thiazides and reserpine, the first orally effective anti-hypertension drugs. So I was beginning to treat some of these people. They were really bad cases.

Then I went, as I said, back to the hospital, rather forgot about all this, but when I came back to Glyncorrwg, I could see that was the thing to go for. A blood pressure was something that everybody had. If I got everybody's blood pressure measured in Glyncorrwg, I'd definitely have, by international standards, quite a large population, and it would really be everybody. Not outpatients at St. Mary's, but really representative people.

So I got 100 percent of the men and 98 percent of the women. I measured their blood pressures and found a whole lot of people who had quite severe hypertension that, on any argument, had to be treated. At that time, it was around the time of the first Veterans Administration trials, so it looked as though intervention was mandatory around diastolic 115, something like that. That's a very conservative interpretation of their data. It was always obvious, looking at the American literature, that American doctors were much more eager to intervene than we were, and I thought that had a lot to do with medical training. The American medical culture is a much more interventionist culture than ours is, which has sometimes worked out well, but usually works out badly. I'll say more about that later on, because I think it's actually the most important thing for you. I think the possibility that doctors are doing net harm is real, that we

actually may kill more people than we save. I think it's a real possibility.

Anyhow, so I published that in the Lancet in 1971. I was consciously trying to make myself respectable. I thought, "If I can get a good clinical paper in and establish my credentials in a good peer-reviewed international journal, then people will listen to me about other things that I've got to say about medicine." That formula actually worked out quite well. It did gain a lot of attention, and then quite soon after that I published the "Inverse Care Law," (also in the Lancet) which was the other kind of paper. But I don't know whether the Inverse Care Law would have been accepted or would have taken off in the way that it did, if I hadn't had that first paper that established me as a respected research clinician.

From then on, I always worked on hypertension as the model for continuing care, with emphasis on patient participation to secure compliance. The whole idea of patients as producers and not consumers has come from that.

Mullan: In terms of the Inverse Care Law taking off, how did that come to you? What response did you experience?

Hart: [Laughter] It was very funny. It was perfectly obvious to everybody, except, I suppose, doctors, that the people who needed care most got the least everywhere. It seemed to me a very trivial observation. I mean, you might just as well have the Inverse Shoe Law that children who walk around in bare feet are least likely to have shoes. If they had shoes, they wouldn't have bare feet, would they? Nobody thought there was anything

unexpected about Imelda Marcos having 3,000 pairs of shoes and most Filipino children having none. So why is it so different with medical care? She also had 3,000 times as much medical care as they had.

I think the reason was because medicine has evolved, particularly in Europe, not so much in America, as a kind of religious formation where doctors were actually able to do very little. Their credibility depended on an association with science which might deliver sometime in the future, but currently wasn't delivering anything, so its whole social structure (at the time of William Osler, when we became recognizably defined a modern profession) was, in fact, powerless and still certainly doing net harm, with heavy metals and all that.

So I think we thought of medical care as a human right just as a place in heaven is a human right. In the days when belief in religion was so universal that it was a sort of material force, heaven was a real place. People did buy places in heaven. The priests were selling indulgences, and if you bought a ticket, you got there. People are not so easily self-deceived now as they were then, and they don't have that theory of belief; they have a spiritual belief. It doesn't matter how many rockets they send up there, they never think that one of them is going to lodge in God's bottom. But in the eighteenth century, that is what people would have thought.

So I think the idea got going that there was a human right to medical care, in a way that there was not a human right to feed and have shoes and have a house and so on. That went deep particularly in European cultures, that there's a social responsibility to provide medical care. Then as medical care

became real and tangible and effective, and had to be paid for, and really cost, and became potentially profitable, not just to the doctors but to the investors, it became increasingly ridiculous for medical care not to be just like everything else. That's what it's becoming now.

Mullan: Your thesis is that in English culture and, by extension, perhaps in European culture, medical care is quite naturally accepted as a basic right, a human right, different than education or different than--

Hart: No, I think that education <u>is</u> regarded as a human right, but education has very close parallels with medical care, naturally, because the most important single function of primary care is education, so naturally there would be close associations. But the idea that the cleverest children should have the most education is firmly lodged in education; people think that's intuitively right. Why the hell? It's absolutely ridiculous. Obviously the greatest efforts need to be made for the children for whom education is difficult. Most of these really clever kids look out for themselves once they've reached takeoff speed.

Whereas in medicine nobody would thank us for preferentially making healthy people healthier rather than trying to do something for people who are manifestly sick. Even when the outlook is pretty well hopeless, there is a moral obligation on doctors to do something about it. One of the worst features of the last ten or fifteen years has been conferences called Thinking the Unthinkable (that phrase keeps cropping up which are

about things like saying, "People are going to die. Why waste money on them?" It's a disgusting way to think, and it's good that medicine has to behave in this ▓irrational▓ but humane way, where we are not allowed to say, "He's going to die," to apply triage to ordinary human situations, not in earthquakes or the middle of wars. It's a lapse into barbarism, I think.

Anyhow, I concentrated on high blood pressure as my vehicle, and where it's ended me up, it has proved a very fortunate choice. The reason I think doctors may be doing net harm, is the scale of continuous medication which has now reached terrifying proportions. We've got--I can't remember what association this is; it must be the Association of American Lipidologists or something like that, but anyhow, some big, prestigious group have said that--and I may not have the figures accurate, but I've got the reference somewhere--I think something like 18 percent of American middle-aged adults, aged fifty to sixty or something like that, are now on lipid-lowering drugs as continuous medication. This association was very concerned that there should be about 40 or 50 percent (according to them) for optimal control of coronary risk.

This is in a field in which we still don't have any satisfactory randomized control trial in sufficient scale that really establishes that there is a reduction in all cause of mortality by having continuous lipid-lowering medication, and there are some quite consistent indications that lipid-lowering drugs (though probably not diet), somehow or other raise the number of deaths from accidents, violence, and suicide. Experts have discounted this on the grounds that there is no biological mechanism suggested for it. Well, I could suggest one straight

off, and that is that if you've got a less than 1 percent negative effect of some kind, like reducing attention spans or impairing concentration, impairing calculation of the closing rate between vehicles, making people more impatient, making people have shorter fuses when they're arguing with their spouses, all sorts of quite marginal changes which are entirely credible. Blood cholesterol is a major metabolite with all sorts of functions and shifting its concentration may have complex effects. I can't remember any detailed biochemistry, but I know that much.

These drugs which are supposed to be targeted so beautifully actually are not very well targeted. They have all sorts of other unexpected effects, many of which have not even been looked for. We are still discovering new things about aspirin, and aspirin's the first of the whole bloody lot.

Mullan: And when unleashed on the population at a 50 percent rate, you magnify that marginal.

Hart: That's the point. That's the point. We know already that 1 percent and less effects are not perceptible even to large-scale trials. We've got doctors who are educated, still, to believe that if they don't see it every couple of months or something like that, it's not happening. I think we are orders of magnitude wrong in the margins of benefit that we think we confer on populations.

I think the importance of medical care is enormous, and I'm right behind John Bunker, for example. He's just written a paper trying to quantify benefits from medical care, and I think that

he's right. I think Ivan Illich was terrible. The doctors are essentially in a noble profession. It always has had a certain nobility to it, in spite of all the scams that have gone on. It was about saving people, not about killing them, which is more than you can say for some other professionals.

But it is a terribly dangerous business, tinkering about with human machinery. We should have the same respect for sustained biochemical interventions. We're not talking about a five-day prescription for an antibiotic which is actually taken for three days because after that your sore throat has got better and you don't take any more, which is the way normal people behave, including doctors; we're talking about something where you teach the patients that they must remember to take their bloody tablets twice a day for the rest of their lives. I think the risk of doing more harm than good is enormous, because we know that the maximum good that we can be conferring is very small.

I think we should be extremely conservative about thresholds for intervention. I think we should be looking at absolute risks, not relative risks. I think we are systematically misinforming the public and ourselves by saying that a twofold risk of something is usually something that requires a sustained biochemical intervention. Intuitively it looks as though it were true, but when you work it out as the chances that this will actually occur during the next five years, it is unacceptable.

I tested the behavior of doctors once. John Coope, a friend of mine who also has done a lot of research on high blood pressure in general practice, and I had a whole group of GPs in

front of us at a meeting of the Royal Society of Medicine. This was about fifteen years ago, I think. We said, "We just want to see what you do to your patients. Would everybody hold up their hands at the diastolic threshold at which they feel that intervention is mandatory." So we started with diastolic of 90, I think, and 95, 100. Well, a few hands went up at 90, very few, a few more at 95, and then at 100, nearly all of them put their hands up, and then perhaps four or five at 105. That's as high as we went.

Then we said, "Right. Now we want to ask you the same question, but you as the patient. You've measured your own blood pressure. What's the intervention point for yourself?" And it was systematically ten millimeters of mercury higher. And they all laughed, because they could all see the point straight away.

I don't think there is any other interpretation you can put on it. Although the drug reps detail men brainwash us into thinking that the benefit of the doubt for the patient is to intervene, for ourselves we think the benefit of the doubt is to leave ourselves alone. We know how ignorant we are of what we're actually doing and we just don't trust ourselves. We don't like the idea of all that stuff going into us and we don't know what the hell's happening to it. That's what our patients are also thinking.

I think clinical decisions are already so difficult, so complex, and these quite minor (I mean apparently minor) decisions like you're going to be on anti-hypertension drugs or on lipid-lowering drugs for the rest of your life, is actually a huge decision, but it's one that we take every day and so we think it a minor decision.

Cochrane is the one that produced that scatter diagram showing the relation of infant mortality to the number of doctors per head of population in fourteen developed OECD countries, which showed a very convincing story that the more doctors you have, the worse the infant mortality. If you looked at dispersions within countries, not between countries, this was not true. There were weaknesses in it. If you took out the countries like Britain and Norway and the other ones that had got fairly well-organized public care systems, there was no story. The story comes from Japan, the United States, France, Germany particularly; that's where the story comes out.

Mullan: In other words, countries with a high concentration of doctors and not very good infant mortality.

Hart: About all, it seemed to be, was fee-earning and high intervention rates. I said to Archie before he died, "I don't know why you think it's so difficult. I don't know why you don't think there's any reasonable hypothesis for this. Why can't it be just buggering about, messing about with people's biochemistry when we're shooting magic bullets in the dark and assuming that we'll hit something, and the something that we hit won't be the patient, it will be the illness?" I think we're talking about a small amount of advantage and small amount of disadvantage. Why shouldn't the disadvantages accumulate to be greater than the advantages?

The terrible problem for GPs, certainly here, is that at the end of the day when you're exhausted, when you've worked so hard, you've done such a lot (it's a hard life, I think, being a

conscientious doctor) you can't believe that God has so organized the world that you can put all that effort in and have a negative result. Well, that is no guarantee that it is not so. I think the reason that GPs in industrial areas and poor districts eventually become demoralized is very largely because they do work so hard, and yet at the end of it, they're not convinced that they've actually achieved anything. They feel so little of what they did corresponded to what they were taught, or had any positive effect on health. Perhaps one patient a week stopped smoking or something like that, then you could be sure you'd done a bit of good, but even now with all the power of medicine, they don't feel they're being very effective in most of their work.

Mullan: It seems to me, in reading work and listening to your thinking, you have made over the years a distinction, you've drawn a line as to where to fight, and that you might characterize as around prevention-oriented issues, but not prevention as a religion, prevention as the most practical way to intervene effectively.

Hart: I hardly ever use the word "prevention." I don't like it, because it conjures up images of rows of children having immunizations or various other standard procedures which become dehumanized very quickly. Of course that kind of prevention is very important, but the essence of prevention is anticipatory care. There is a preventive component, for example, in terminal care. You're obviously not going to save this person from dying, but that isn't your object; your object is that they should have a decent, dignified death. That means that you don't just

address the patient's expectation that you bring to the contact with the patient your own knowledge which they don't have. That is anticipatory care.

You have a duty to maximize the input from their knowledge; this is the most neglected aspect of medicine, to enable patients to play a full role in joint production with you. The other thing that you have to do is to bring your own knowledge and raise the level of expectations beyond what patients would have by themselves. We know things they don't know, and we ought to be thinking about what's likely to happen, and what simple things we can do to make it less likely that some very complicated thing will have to be done tomorrow.

We watched on the TV last night an American series that [Steven] Spielberg's been involved in. It's very well produced.

Mullan: "E.R."?

Hart: Yes.

Mullan: [Michael] Creighton.

Hart: It looks like an emergency room, but I think its profoundly misleading. I mean, by all means show it, but it should be shown not as something wonderful that we should gasp at; it's a bloody disgrace that nine out of ten of those people, they shouldn't be there because their crises shouldn't have happened. They shouldn't have stabbed each other; they shouldn't be in ketoacidotic coma because they should have understood their diabetes, and they should have led a civilized life and so on.

I'm fed up with seeing my colleagues made to feel small because very simple evasive actions that could be taken a week or two earlier are regarded with less respect than stringing up a drip and doing all these other wonderful things in the E.R. room. It's a failure of medicine, not a success.

That is the terrible weakness of American medicine, that it's so good at salvage of ships that should never have sunk. The idea that a ship that's not sinking is boring, is nonsense. If you know the patients, when Harry comes in and you say, "Hello, Harry. Sit down. How are you?" and you talk to him about his children, it's pleasant. It's fun. It's nice to see healthy people and discuss their minor ailments with them. I couldn't bear it if every single day of the week in a known population people were coming in at a rate of one or two an hour with ghastly cancers and blood dyscrasia and things like that. I can bear these once or twice a week; that's quite enough for me. I think this horrible thirst for blood that you get in medical school, where you're wanting to see big diseases all the time is a horrible, unhealthy thing in medicine. So I think it's about anticipatory care, not prevention. Stitches in time.

Mullan: We're continuing our interview. I have a series of questions about the nature of life as a GP. Status is always an issue, and in most settings, the GP status is considered lower than that of the specialist or the consultant. I'm not asking so much how do you feel about that, but how do you experience that in terms of either your patients or your family or peers elsewhere? How do they treat your status as GP over the years?

Hart: Well, in general, you've got higher status as a GP in Britain than any other country. I mean, if I go abroad, I'm sitting on a plane and the person next to me asks me what I do and I say, "I'm a doctor," they always immediately say, "Oh. What is your specialty?" And when I have to admit that I'm a general practitioner, a look goes over their face, "Poor chap. You're not very successful." Now, that doesn't happen in this country, and GPs are not despised by the public, but they undoubtedly are ranked lower than consultants and specialists.

Until the late sixties or early seventies, I'd say that the overwhelming majority of GPs ranked themselves lower than consultants and specialists; they actually thought that. We've got good evidence that that's so. After 1966, general practice was resourced by direct investment in general practice by government funding to help pay for staffs and better premises and equipment and so on, and at the same time a decision was taken by the government to increase GPs' incomes relative to consultants' incomes. The consultants were very angry. It took them a long, time to recover. I think there's no doubt at all that it did enormously increase the GPs' self-confidence and self-esteem, which they badly needed.

Like other GPs, I never had the experience of any consultant ever asking me my opinion about the service they provided for our patients. They were totally insensitive to us. I knew very well that if I were in America, I would be courted by consultants because they needed my referrals. Here they didn't need my referrals, because it didn't carry a fee with it. Their earnings were not dependent on my referrals.

I had a fight with an orthopedic surgeon in London, which was repeated with another similar orthopedic surgeon in South Wales, so I can compare the two. The one in London, I would write a referral of my patient to him, and he never wrote back, which was exceptional. I mean, British consultants did normally communicate with GPs. He would never write back a letter, so finally I got fed up with it and wrote a letter to him and said, "Dear Mr. So-and-so, Unless you start replying to my letters, I'm going to stop sending any more patients to St. Charles Hospital Orthopedic Department. I'll be sending them to Hammersmith instead." Because I had a choice. There were lots of different hospitals in London.

I got a long, long letter back from him, full of apologies and groveling and so on. That did hit him. He was worried about a substantial drop in case load. But short of that kind of threat, you couldn't get their attention.

The orthopedic surgeon at Nealth Hospital, when I came to South Wales, who behaved exactly the same way, he was not apologetic. I had to ring him up. I couldn't threaten that I would send patients elsewhere because there wasn't an elsewhere within reasonable reach. But I rang him up and said, "Really, you know, you're paid as a consultant and that means that you're consulting with me. That means you're telling me what you think. You're giving me your opinion. How can that happen if you don't write me a letter? I never send a patient to you without a letter. How can you send them back to me without a letter?"

And he said, "You don't seem to understand how I work. Dr. Hart. Do you realize that in the last twenty-four hours I've seen over 100 patients? And I don't normally finish work 'til

about half past nine or ten at night. I'm not going to start writing letters at that point. I'm doing clinical medicine and surgery all day long."

He was quite honest, he was a popular doctor with the patients and he was a good jobbing surgeon. He just didn't know how to handle under-resourcing in the National Health Service. He was being exploited by his senior colleague. There were two orthopedic consultants; he was junior.

Mullan: Interview with Dr. Tudor Hart, 2/2/95. This is tape number three.

Hart: The senior consultant prided himself on the high quality of his work, and he could because he controlled the patient flow. Where his junior colleague would see over 100 patients in a day, he would see perhaps 15 or 20 or something like that. As he wasn't seeing so many people, he wrote good letters. That was typical of two different attitudes to specialists' work, one just working as a specialist and not as a consultant, and the other one actually working as a consultant, but because he could work in a nice, leisurely, gentlemanly way.

It ties in with what you're saying about how you're regarded. If you were in a position in the Health Service, whether you're a GP or anything else, where you worked like sting, you would generally be looked down upon, whereas if you could see people slowly and fastidiously and so on, you were admired. It's cockeyed.

The second way I got problems was that I was not only a GP, but I was working in an area very unattractive to doctors,

because in general the income was about half and the workload was about twice as great as the average GP would expect, so it had everything against it. And the quality of the local schools was not good, and that was all there was available for my kids.

So the first assumption during my first five to ten years in Glynworwug when I met people that I didn't know and didn't know me, was that there was something funny about me, probably alcoholic. The doctor I had replaced in Glynworwug was alcoholic. Between one in three and one in four of all the doctors that ever worked in the Ajan Valley since 1900 had major alcohol problems. I've written a history of it which is lodged with the Wellcome Library of the History of Medicine, embargoed until my death.

At the bottom of the heap, if you go to any area that other people don't want to go to, whether it's in Britain or America or France or whatever, the incidence of major pathology in the doctors is huge, and there tends to be an assumption that if you're working in such a depressed area, there must be something funny about you, and probably you're a rather inadequate person.

Mullan: In terms of status issues, over the course of your practice, over the course of those years, did they change at all?

Hart: Yes.

Mullan: In what way?

Hart: It was planned change. I mean, I calculated. I wanted it to change. I didn't want to be isolated. There were three areas

of change. The first one was that I made myself respectable because I published research papers in big peer-review journals that were difficult to get into, and that was very intimidating not only to other GPs, but also to local specialists who didn't do that. So I gained a lot of respect from people, though often it was tinged with fear.

The second thing I did quite deliberately was to some extent to feed an appetite for sentimentalizing my position. I learned very early on that the top doctors in teaching hospitals and so on, I could get very good connections with those sort of people. It's easy to get good connections, because they were conscious of the weakness of their position in many ways. They knew that they didn't know anything about what happened on the ground in medicine. They made facetious remarks like, "Well, of course, you're a real doctor," that is, me. Now, they didn't really mean that, of course; they probably thought they were more a real doctor than I was. But there was a sense in which they did feel they were only narrow specialties. There were really quite a lot of things I knew that they didn't know.

Very few even top doctors actually keep up much outside their own field. The number of them who give any real evidence that they read widely in the major journals is quite small. I used to find that I could get more support, I could get grant support, I could get my papers published, and so on in a restrained sort of way, not overdoing it. If they wanted to think that everybody loved me in Glynworwug, that I knew the names of all the dogs and all the cats and the children, that everybody thought that I was really the greatest thing that ever happened since sliced bread, if they wanted to think that, I

didn't care. Of course, it was absolute rubbish. I wasn't liked by all my patients and I've known other GPs who were loved by more patients than I was, not always rightly. If you want to be loved by all your patients, there are usually some big problems about how you're working, I think.

Thirdly, I think I changed patients' expectations. I found I had to have collisions. For one thing, there were normally about eight families in Glyncorrwg that were not registered with me; they weren't always the same eight families. It was a shifting population. But virtually all of them had been my patients at some time and they left my list because they'd quarreled with me or I hadn't done something they wanted me to do or something like that. I hated losing people, mainly because I had a relatively small fixed population with some out-migration and no in-migration, and I needed the numbers for the research studies I was doing, and I was very interested in what was going to happen to people. I was just as interested in what was going to happen to people I didn't like as people I did like.

So I tried to avoid, as far as possible, losing people, but inevitably some people did go. Because whole families were registered with me, problems like wife-battering, which was quite common. (Always common, It's recently been recognized, but it always existed, and when I first found it, I'd been completely unprepared for it. Medical schools didn't seem to know about it.) I had to say to the women (it was nearly always women being battered) "It is your right to take some legal action about this, and if you do, then what you've said to me, what I've seen and so on, is all recorded here and is available as evidence for you if you want to use it. But if you don't want to use it, you must

make sure that if you get any more hammering like this, that you will come and see me and we will get it written down so that you have a cumulative body of evidence, because you may change your mind and you may decide you're going to do something about it legally. I've got the name and address of a lawyer you can go to if you want help."

I had to do that in the full knowledge that the next time there was a row, this woman would say to her husband, "Dr. Hart doesn't think it's all right. He said I should go to a lawyer, and he'll give me the name of a lawyer, and he wrote down everything you did to me," and so on. I know that must have been what they said. And yet very, very few of those husbands ever left my list. Some of them I had quite a poor relationship with, because I knew that they knew, but not much was spoken.

But in general, they tolerated that. Strict rules of confidentiality were unsustainable if you're the only doctor for a virtually closed community, but people accept that. They can see that that's a necessary reality. I found all the time that I was having to take decisions for which not only medical education had not prepared me, but no other kind of education had either. You had to work it out as you went along. In all the time I never had an official complaint about me, ever, but if I had, I had always felt that I would have to be in a position to throw myself at the mercy of the court and say, "Well, I did my best. I can't do more than that. If you think some other doctor would have done it better than me, okay, but actually, on the whole, from what I've seen in my colleagues, that's not so. I know that in spite of my terrible mistakes that have occasionally resulted in deaths, that even then I was still in the top decile of the

distribution of quality of care." So what's happening in the other 90 percent?

Mullan: In terms of status, over the period of time you were in practice, not in terms of your maturation or contributions or changes, but in terms of your perception of what was happening or what has happened in society as a whole, were there any changes in attitudes towards the generalist as opposed to the specialist?

Hart: Oh, yes. Within the village, I think there's no doubt at all within my micro population, I think expectations were hugely changed.

Mullan: Expectations of you?

Hart: Of me and of the hospital. I wanted to demystify what I was doing. I didn't want to have a status that you have automatically because you're a doctor and an educated person. Obviously I couldn't completely get rid of that. Anyway, some patients don't want you to do that. I mean, getting off the pedestal is actually quite difficult.

We had one doctor working with us at one time. Most of the time I was in partnership, but my partners never worked in the same village because the populations weren't big enough. Welsh mining valleys, in general, you've got a village in one place and then five miles away you've got another village, then three miles away another village, and each one had one or two doctors and so on. Well, I was in partnership usually with one other doctor, sometimes with two other doctors, working in different parts.

Mullan: Just as an aside, what meant "partnership"? You'd share call?

Hart: Yes. For us it just meant sharing calls, sharing ideas; from about 1976 onwards, sharing training, because I was a training GP with a trainee, and I involved the others in training. We shared all business expenses and profits equally, and we always brought in partners with an equal share immediately, partly because we were earning so little that you couldn't have given them less than equal share anyway. But I never felt unequal partnerships were right; I thought the best thing was just to have a straightforward equal division of earnings and expenses.

Mullan: If your list was larger than their list, for instance?

Hart: There wasn't that much in it. There was some difference in list size, and there were certainly differences in responsibilities, but give or take, in general, we were desperate to get other doctor. We got stung; I mean, we had one crook who came in, an awful man who broke away and took away a whole lot of patients. It was extremely difficult to recruit people to work in the area. We had a constant stream of visitors from all over the world, but we didn't get people who wanted to come and stay and work. But that's the story of any poor neighborhood anyway.

Mullan: We were talking about status, about the change in expectations.

Hart: Right. So I tried to demystify it. I thought it was important not to dress down. I didn't think going around in jeans and no tie, which might be fine in some parts of the world, but in working-class areas of Britain, that would be regarded as insulting the patients. It might not be to the youngest generation, no, but when I was working, people felt that if a doctor wasn't bothering to dress tidy, then that was an insult to them. But I used a steel engineer's toolbox as my bag, partly because if I had a call underground or in a difficult place, then it would be bashed about and so on, but it was also, to some extent, symbolic. I wanted people to see that what I had was tools of my trade, not magic.

I always tried to get patients to examine themselves and each other. I got mothers to look down their kids' throats so that the next day I could ring them up and say, "What does it look like today compared with what you saw yesterday?" And so on. Not to save myself a visit, but mainly to get them to begin to observe. I tried very hard to get people to see that the reason they got better was not necessarily because of an intervention, that it might just as easily be spontaneous recovery.

One thing that changed for the patients was that I started dictating my letters in a tape recorder like this, to be typed, I did this in front of the patient so that he knew what I was saying in a letter, which, first of all, meant that I stopped writing rude letters altogether; I didn't say nasty things about patients, which I think was quite important. I'm not that nice a person; I have written malicious letters about patients. If you

write the letter in front of the patient, you don't do that. It's a good device.

I wanted the patients to know how I formulated my questions, because one of my big problems was that many specialists don't really deal with a referral in the terms of the referral. They don't advise you on the things you've asked for advice about; they just gobble up the patient into their specialty and perhaps don't even spit them out again afterwards, they just hang onto the patient forever as though you weren't capable of listening to their advice. For most things (not for everything, but for most things), I regarded consultants as consultants. I don't think that their job was to take over indefinitely the management of the patient. I wanted, in reply, guidelines. That's where guidelines really are useful--personal guidelines. "I want you to measure HBA-1C and if it exceeds so and so, that's when I want to see the patient."

I wanted the patients to know that I asked those questions, because I'd say about half the time the consultants actually paid no attention to that kind of thing. Well, it was a good thing for patients to know that. Where patients had complaints about the way they'd been treated in hospitals, I was not prepared to cover up for other people. I made some mortal enemies in the hospital because of that. I found that it really is an unforgivable sin not to cover up the gross errors of your colleagues. I didn't expect them to cover up my gross errors, so I didn't see why I should cover up theirs. What I was prepared to do was defend them, to say, "Probably you got the rough edge of his tongue because the poor bugger had seen some awful person just before you, or perhaps he'd seen five or six of them and he

was at the end of his tether." But I don't think you should pretend.

The business of always blaming patients for everything that goes wrong, I found was endemic in the hospitals, even at the most elementary level. I'd get a letter saying, "Miss Robinson was given an appointment for last Wednesday at three o'clock. She did not turn up for the appointment and didn't send an apology. We will therefore be crossing her off the list." Nearly always I would find the patients had taken great trouble to telephone the hospital or write to the hospital and say, "I won't be able to go because my Uncle So-and-so, his wife has just died and I've got to go to the funeral," or, you know, all sorts of reasons that people have. And yet they had this duplicated standard letter. I think standard letters are the most bloody awful things invented. They didn't seem to think there was anything wrong at the hospital with putting a patient in the shit, you know.

So this kind of thing happened all the time, and I'd only got the one hospital to use (there was some choice of hospital, especially for tertiary referral, but in general I wanted to use my local hospital).

Mullan: Where was the local hospital?

Hart: Neath. It's threatened with closure now. It's not a very good hospital. It's got low morale; it's always had low morale. It actually reflects the same problems that I had in my practice. It's a grotty hospital for a grotty area, and the specialists who work there mostly felt a permanent grievance that that's where

they were working; they thought they were better than that, they deserved something better.

I don't know. This is the upside-down problem, why on earth if a patient's got severe pain in the right iliac fossa, why look at their teeth? Because it's more pleasant and less work than taking their appendix out. With the body politic, that's what they do. They all want to work in a nice, healthy area where you don't get much work. There is no honor for people that work in the shit.

Mullan: Let me use that to turn to one of the other questions about practice as a generalist, realizing this is dependent in this country largely on the system, and that's income--the generalist's income, what it's like, how it compares to a specialist, and how that's evolved over the years, and how you and other generalists, or how you and other GPs, felt about it. It derives from both capitation--

Hart: It is incredibly complicated. It's always had three components, but which have been very varied. This is for GPs. There's been a salary component, which has now been virtually abolished, but was quite significant, a basic salary. Then there was capitation on top of that, which accounted for the bulk of your income, and finally there were a number of fee-for-service payments which were inducements to do particular things like childhood immunizations and so on.

And then there is a fourth category which has nothing to do with National Health Service, and that was various things that you were able to charge for either directly to patients, like

corroborative statements for incapacity for work and things like that for their employer, and private examinations for insurance and so on. This is really where the difference in income in different areas comes in. I had evidence on this at one point.

In 1965, I think it was, Dr. Reg Saxton, who had been a friend of my father in the International Brigade in Spain, decided that he was going to spend the last five years of his professional life before he retired in South Wales; he gave up his practice in Brighton. He was British middle-class (U.S.-lower upper class), quite well-heeled, but on the Monopoly board it wasn't Park Lane and Mayfair; it was about three-quarters of the way around the board. He found that he'd got very little private practice there; I think he'd got three or four families that had insisted on seeing him privately. But his net income there was double the income he had in our practice, although the population size was almost identical. The difference was not more than forty or fifty patients. It was made up mainly of all sorts of little juicy bits like insurance examinations and so on. People in poor areas just don't take out that kind of insurance. They have insurances, but they're quite small and they don't involve physical examination, and therefore attract almost no fee.

So there were a whole lot of ways of earning money just because you can put a medical signature, that are available to doctors in rich areas that are not available to doctors in poor areas, unless they're willing to screw the poor. That is a big difference. My successor in practice now takes patients for every penny he can get. He's legally entitled to do that, but, for example, a man comes along and he wants an examination for a

heavy-goods-vehicle license so he can drive a truck. He will be unemployed. Unless he's got that license, he can't even apply for a job. But there's a fee which now runs about 65 or 70 pounds. It's a standard examination, doesn't include an ECG. The visual fields by confrontation, visual acuity in two eyes using a Snellen's chart, blood pressure, and a little listen around the lungs and heart, you know, but that's it. If you've got well-kept records, then the answer to nearly all these things are already available from the records. Actually, I usually ended up just doing visual fields by confrontation and almost nothing else at all.

I once found a man who was amblyopic in one eye; this was before the HGV license was brought in. I remember I said to him (I knew he was driving a lorry about the size of this house), I said, "You know, I'm sure they're going to bring legislation in so that one-eyed men aren't able to drive trucks anymore, so my advice to you is get out of that trade and into something where it doesn't matter." A couple of years later, there was this legislation. He just looked at me and didn't say anything. His wife came in and said, "They've made this new law. You know John hasn't got very good vision in one eye."

I said, "Yes, he's blind in one eye."

She said, "Well, Dr. Hart, what will you do if he comes in?"

I said, "Well, you know what I'll do. The law is that if he's only got sight in one eye, he can't drive a truck."

So there was a long silence, her waiting for me to say something that would give him some sort of let-out, and in the end, to break the silence, I said, "Well, of course, he doesn't have to see me; he can see any doctor for the examination. I

don't think any other doctor, if he actually does examine him, is going to find anything different."

He's spent the rest of his life driving a truck and he undoubtedly found a doctor that was willing to do this. But actually there was a sort of guarantee that he would, because in those days the charge was about 10 pounds or something, a lot of money. If you're paying a lot of money for a certificate, you expect to get it. The only guarantee that the certificate will be honest is if you're not paying a fee for it. To charge a man 65 pounds (the present level of charge) to be disallowed as a truck driver is really impossible, and yet this fiction goes on.

So poor people's doctors do come in two categories, and the patients all know this, and it's a very important part of their status in the community. There are the doctors who charge everything they can to the patients, and I suppose they do have a kind of status. There is a kind of respect that you have for being a ruthless businessman in a poor community, and that is a kind of status. And there's a kind of status that you have, a reputation, if you don't do this.

Mullan: What about the salary of the GP versus the consultant?

Hart: As I said, up until 1966, there was a big difference. I can't remember what the values would have been in those days, but when I retired in 1987 from the practice, I had another five years' work at the MRC (Medical Research Council), still working in the village, but when I retired from the practice, my salary was just over 20,000 pounds a year, net, after paying practice expenses, but before paying for my car. The average expected GP

income at that time was about 32,000, so I was somewhere around two-thirds of the average GP income.

Mullan: And that was just because of the poverty of the area?

Hart: It was partly that. It was partly that I spent a lot on the practice. You've got to remember that where Lloyd George was so cunning and subsequent health ministers, in the NHS the GP is still responsible for his own practice, equipment, staff, and expenses. So I always spent a lot on the practice, and I spent on the practice first, then looked at how much was left over for me to spend afterwards.

Mullan: That would have been more staff, for instance?

Hart: Yes, all my staff were part-time so that I got maximum flexibility. They were all local women from the village. So I had two part-time nurses and two part-time office workers and a practice manager; five people total. But that was vastly more than most single-handed GPs would have. I employed people before the 1967 NHS reforms; relatively few doctors even had a receptionist. My father, for example, who became a GP after the war, he didn't even have a receptionist. Whenever I said, "Don't you think you should have somebody just to get the records out for you?" "Oh, I can get the records out if I really need them." So half the time he didn't need them. But he couldn't afford it; that's to say, he'd spent all his money and he was always in overdraft.

Mullan: So the 20,000 for you and the 32,000 for the average person were after practice expenses?

Hart: That was after practice expenses, yes.

Mullan: What would you have netted the same year you were making 20,000, the salaries for everybody else, etc., 35,000, 40,000?

Hart: You mean what would be the practice gross income? Gross income would have been about double that; something like that. It's nothing to do with this, but I was lucky with the pension, because my pension actually turned out to be much more than I'd expected it to be. I was a dispensing doctor; I prescribed and dispensed drugs. Although I made very little money on that because I systematically tried to keep my prescribing costs down, although we were paid on a percentage of prescribing costs. But the practice gross income was colossal because of the drugs coming through, and there were relatively few GPs who dispensed. It was to do with being in a relatively isolated place where there was no druggist in the village. That was used in calculating my pension, so actually I think we're relatively better off now than we were when I was working. I mean, absolutely it's less, but on the other hand it costs me less to live.

But actually, the British GP pension is quite good. It's always been negotiated well, and I think the reason the Department of Health always had a relatively enlightened attitude to it was that they realized that they needed some incentive for GPs to retire. They didn't want to be cluttered up with eighty-

five or ninety-year-olds pretending they were still doctors, which does happen in Europe a lot. Doctors are not prone to retire.

Mullan: What do consultants make?

Hart: Consultants used to come in two varieties. There were full-time and part-time consultants. The full-time consultants were all the pathologists, radiologists, anesthesiologists, all the unglamourous specialties. Very few surgeons and physicians were full time; they would usually be part time so they got to do some private practice. But most of them didn't do very much private practice. Doing a lot of private practice was rare, except for a few surgeons.

That whole scene began to change in the late seventies. The Labor government--I don't understand under what pressures--brought in a new consultant contract which could have been designed to encourage private practice. It compelled all consultants to at least say that they did some private practice; it encouraged them to do some. It completely removed any kind of incentive for people to work full time on a salary. Well, I think myself that Barbara Castle, who had been a previous Labor Minister of Health, had been very much opposed on principle to private practice and had taken quite a punitive attitude to it, she probably did net damage to the whole service simply by antagonizing such a lot of people. I think she was unwise.

I'm opposed to private practice, too; I have never seen a private patient in my life and I just don't believe in buying and selling medical care as a commodity. It seems to me such a

marvelous position to be in, never to take money from patients. You know from your own experience that it's marvelous to know that you really are independent, that if you have to offend your patient, that's all right; they didn't buy you. They can take or leave what you say, but you're giving an honest opinion. I think that's quite difficult to do when you get paid money all the time, and patients let you know it. They have bought you.

The consultants have a thing called a merit award system, Distinction Awards. They were brought in in 1948 as part of the a compromise to secure cooperation from the consultants. The theory of merit awards was that because private practice was expected to disappear and because all the teaching hospital consultants who were, in the nature of things, distinguished people, that they must be compensated for their loss of private practice. So they have these A, B, and C merit awards, which are top-rate double--I think it's more than double their income. The people are chosen for this by a committee, the composition of which has never been published, of people who already have merit awards.

Mullan: Each year?

Hart: I don't know if they change each year, but, yes, the awards are made, I think annually. They make an enormous difference not only to their income, but to their pensions. A lot of people are given merit awards within six months of retirement, so that maximizes their pensions. As I said, it was to compensate for loss of private practice, but actually they

never did lose private practice. Most consultants continued to have private practices.

Private practice effectively vanished in 1948 for GPs, but it didn't vanish for hospital consultants. It piddled along. It wasn't anything like as big as it had been, but they didn't lose. Merit Awards became, and are still held onto, because they are a very powerful instrument of control. The predictable people that don't get them, or very rarely get them, are those in geriatrics psychiatry, pathologists, radiologists, anaesthetists and so on . The king and queen specialties like cardiologists, neurologists, neurosurgeons, they get them. Above all, you get then for not rocking the boat.

In 1963 or '64, I think it was, there was a pay agreement supplement where the awarding body, the review body for doctors' pay, were very concerned about bad doctors, poor-quality doctors, and they thought what was wrong with general practice was that they didn't have a career structure and there was no distinction between good doctors and bad doctors. So they wanted GPs to accept distinction awards on essentially the same principle as the consultants, and they earmarked a large sum of money, several million pounds, for this purpose and said that if the GPs didn't accept it, they couldn't have it. They either agreed to have it in that form or they wouldn't have it at all.

I remember going to a meeting and sticking up for it. I did think at that time that it was a good idea. I was still quite burned up about poor-quality doctors. I was conscious of the fact that I was going to be one of the good ones and that I would get it.

I've completely changed my mind since then. I think it's enormously to the credit of GPs that they refused. The GPs have quite a strong egalitarian tradition. They don't like any GP saying, "I'm better than you." Some of this is bad. I mean, it's a sort of collusion. Most GPs in this country don't talk clinical shop to each other. I like talking clinical shop, and I find most progressive GPs do, but if you're talking to GPs in a pub, over a drink, on the whole you don't discuss--if you do discuss cases at all, you discuss them socially, you don't discuss them in clinical terms. It's a sort of agreement that we won't show off to each other about what we know. I think, on the whole, it's good. I think what it is, is a hatred of what we all had in medical school, as housemen on rounds groveling to powerful consultants, that we don't want to be like that. We don't want to have winners and losers who can quote from the latest journals and so on. So to this day, the GPs don't have any career structure at all.

Consultants now can make enormous sums with private practice, especially surgeons. They are now, a lot of them, in the millionaire bracket, and undoubtedly that has limited their opposition to the so-called reform of the NHS, and it's made the GPs relatively much more militant than the consultants. I think a lot of consultants have been bought off. But even then, of course, what I call high earnings, compared with high earnings in America, they pale in significance.

Mullan: On the question of the culture of general practice, training, I gather, is still a bit catch-as-catch-can. There is not a general practice full house officership? People take it

but they take a couple of years on their own with mixing and matching courses and then a year as a consultant?

Hart: No. There are two ways of doing it. A large majority of GPs, trainees, go on structured courses with a rotation through hospital departments, usually in one or two closely associated hospitals. That's a three-year thing, and the third year is spent in a practice, as a trainee assistant in a practice.

A minority of people still set up their own course, stitching together training from different places. The disadvantages of that are, first of all, that you can't attend the same day release course consistently through the whole three years, which would be an advantage if you did that. On the other hand, many hospital consultants have not, in fact, allowed their housemen to attend day release courses.

Mullan: "Day release" meaning?

Hart: One day a week, usually one half-day a week, all the trainees in an area get together and they are taught and learn jointly under the overall supervision of a training course organizer.

Mullan: Everyone in the hospital?

Hart: This would not be a hospital; this would be trainees in general practice. The people doing the hospital phase may or may not be given time off to go for those courses, and typically in some specialties like obstetrics, for instance, they're not

allowed to go, with the consultants claiming they cannot be spared. We're always up against the problem in Britain that you are supposed to learn by doing, which in some ways is very good. In a lot of other countries the training is much too theoretical--books and lectures and so on. But on the other hand, if you simply get practice, if you're doing service medicine and nobody is reviewing what you're doing, you're not discussing it with anybody, then you're just as likely to be learning bad habits as good ones.

In general, you have to remember that there is a colossal difference in staffing between British training and American training, and between British training and European training. The last time there were any comparable figures was quite a long time ago, but I doubt whether the relativities have changed; the absolute numbers may have changed. At that time, say about 1970, there was an average of about 2 teachers to each student in American medical schools--this is undergraduates I'm talking about now, but the same sort of thing spills over to postgraduate training, too, really. There were about 2 teachers for every student. Some of those teachers, of course, were not teachers; some of them were researchers who nominally were teaching but actually weren't doing any. But there were 2 members of staff for every student. In Britain I think it was about one teacher for every ten or twelve students. In most countries in Western Europe, it was over thirty students to each teacher, and in Italy and Spain, it was 300 or 400.

It's quite pointless to start talking about small-group teaching if you've got 400 in a class, and it's pointless to talk about spending plenty of time with tutors, discussing every

single case that you've seen that morning in the outpatients if you've got a big service load and not a lot of teachers.

One of my trainees--well, I was really responsible, he let one of my patients die unnecessarily by diagnosing jaundice as though that was a diagnosis, without worrying about what the cause of the jaundice was, and by the time I saw this guy in the afternoon, he'd got ascending cholangitis. He was a man in his eighties. I hadn't precepted him on it. I mean, I had no reason to think this guy was very ill when he sent for my trainee, and by the afternoon it was too late. But I never could have a system where I would review every patient seen by my trainee immediately after they'd seen them. We just didn't have staffing to allow it.

Hart: Because it had already happened, it was more difficult than to give him a row about a patient who didn't die but would have died if he hadn't been retrieved, than a patient who actually had died. I tackled him on it. He was quite cavalier about it and said, "He was a very old man, and I can't see that this would have made much difference." He was impertinent about it. He was an Indian trainee, born in England, which made it quite difficult, because I didn't want to be accused of not being nice to him. I was furious, because he'd never seen the patient before, and I knew what a healthy old man he was. It was dreadful. This trainee has never talked to me since. He works in Swansea, only half an hour away. I made a mortal enemy.

I feel very critical of the trainee system everywhere. There was only one trainee I ever had where I really was convinced that I had taught him something he would not have

taught himself if I hadn't been available. All the others, the good trainees came in good and went out good. They were good students, came in as good trainees, went out as better trainees because they'd had more experience, but I hadn't actually changed them; I'd just given them a good practice to work in.

The bad trainees, people that came in bad, clinically not good, I didn't change them; they went out bad. I think to have one year right at the end of training and where I think we have a real problem about authority and status in respect to work of the trainees, I think they do really think that if they've made it that far and got away with whatever it is they've gotten away with, up to the point where they've got to GP training, that for that GP trainer to shoot them down and say, "You're not competent to be a GP," can't be right. If they were that bad, they should have been caught earlier by a "real doctor." That was always how I felt about that.

Mullan: And you had them in your practice right along?

Hart: Yes, I think it was '75 or '76. I had, I think, thirteen trainees altogether. I signed them all up as being competent to practice on their own. There was at least one, and it was not the one I was talking to you about, where I think that was wrong, but I didn't know what else to do. He was an Indian, as well. It would have been easier to shoot him down if he hadn't been a nice man, but he was, in fact, only competent to work with other colleagues keeping an eye on what he was doing. I don't think he should ever have been a doctor.

We had major cultural problems with Indians trained in India, not Pakistan. There is something about Brahmanism that leads to this terrible memorizing of what's in a book, parroting for an examination, but not having any clinical common sense at all. I would have liked to have seen a compulsory terminal exam. I think exams have a real value in allowing you to execute some people without anybody being responsible for firing.

Mullan: And there is not a competence exam?

Hart: The college has an exam, which is a good exam, I mean as exams go. I think it's quite good at testing clinical honesty, as far as you can do that. But it's an option, not compulsory. You can still work as a GP without passing it.

Mullan: Do specialties have exams?

Hart: The specialties have exams, but not like ours. I think ours are better than theirs.

Mullan: But theirs are used and yours isn't?

Hart: Yes, that's right. In law, a man can be appointed as a consultant without his Fellowship at the Royal College of Surgeons or Membership in the Royal College of Physicians, but in practice they can't. There is a convention that if you don't pass one of those exams, you're just not in.

I was very active in the College of General Practitioners. I was an elected member of council for a very long time. I

always said that I thought the college exam should be a compulsory exit exam at the end of trainee year. The BMA was always extremely hostile to this.

Mullan: In what way?

Hart: Essentially what they're doing is they're defending that position that you were attacking earlier; they were defending the anarchy of general practice. They're essentially trying to defend the position of existing GPs. I think there's a conspiracy on the part of all the other specialties that there must be one dustbin (garbage can) specialty, because there has to be somewhere to put people who are really not competent. It's a permanently insolvable problem, as far as I can see, but I don't know where the hell to put them. We can all think of other specialties, not our own, which we think are less dangerous places for incompetent people to be.

Anyway, I felt that there were people who should have been given the chop. You built up a personal relationship with somebody working through the year. Ideally we should have had much more in service assessment, intern assessments. I should have been in a position where I could say to people, after the first three months, "Look, Jim, please don't take offense, but, honestly, the way you're running, I'm not going to be able to pass you at the end of the year. These are the things that you've got to pay attention to."

It's partly because I wasn't a very good teacher. I think it's mainly because our teaching was not sufficiently structured. It's partly because the best teachers, the teachers with most

authority, who are most experienced in designing a course and so on, that wasn't particularly what I went in for. They don't get bad trainees. Trainers have choice about the trainees they get, and of course, as usual, the good guys want the good guys.

Although I did a lot of teaching at day release courses, and still do, and, in general, inspire fear and awe in trainees because I'm a known figure, that wasn't how I was inside the practice. I kept feeling sorry for them. I don't know how to avoid this problem. I've always seen the doctors who were failures as really victims as much as anything, and although I get angry with them and they kill people, I suppose it's because the medical school curriculum overwhelmingly is an obstacle race to test not whether you can be a good doctor, but test whether you can survive as a medical student and a houseman. I think a houseman who doesn't completely crack up under the strains of being a junior hospital doctor, that is the ultimate test of destruction that doctors go through. Everything else after that, they've sort of earned a rest. I think it's a horrible system. I think it's not much different here than it is in the States.

Mullan: Yes. I understand that less people are picking GP house officerships these days.

Hart: Here?

Mullan: Yes.

Hart: That has a very complex set of things around it. My son Ben was in that position. Ben's having to do an extra year

because he spent quite a long time dithering about what he was going to do. That is because imposition of business responsibilities on GPs by the ▓reform▓ of 1990. They're not sure whether they're going to like being GPs anymore. The attraction of general practice used to be that on the one hand you had clinical autonomy; you didn't have a boss anymore and you could actually do what you wanted with your patients, in general, in a very good way. It wasn't that you didn't need to work responsibly; it was just that you didn't have to pretend to agree with the prejudices of the boss man.

So the idea of having your own little unit was very attractive, but now suddenly it's got all these other administrative and business responsibilities connected with it, and they don't like that. There's no question about it, a huge question mark has been shoved into the whole of general practice. It's been destabilized, and people have very insecure feelings.

Mullan: That's the [unclear]?

Hart: Yes, all those things. I think a lot of people have held back. Well, that was what Ben said; he said, "I want to keep my options open as long as I can."

Mullan: So what did he do for the year?

Hart: He just did more hospital jobs. You can always do that because there's a shortage of junior hospital staff. There was nothing wrong with being more experienced and better qualified. He'd also got a horror of being undertrained, and he's

hyperconscientious. He worries a lot. He worries more than I do, and I'm a big worrier. I think each successive generation of doctors actually regards their predecessors as in some ways quite brutal in the sort of uncertainties that they could tolerate. Well, that's all right, that's progress.

Mullan: So he took more time?

Hart: And not only him, but his whole cohort was like that. There's been a catastrophic fall in the number of applicants for training places. Even, say, areas like Oxford and so on, where you would get hundreds of applicants for a trainee post, they now have eight or ten applicants, so they see that as catastrophic. But for us in the valleys, it's just been wiped out; there is no longer any trainee scheme in any of the old coal mining valleys. The Merthyr scheme, the Neath scheme, the Bridgend scheme, they've all folded because there aren't any applications. Naturally, if the demand goes down, it, first of all, goes down in rural areas, distressed areas, and so on.

Mullan: Does that mean that there's going to be a shortfall on GPs before long?

Hart: Yes, absolutely it does. I think if this government got in again, they like the Ontario government will look at nurse practitioners, not for good reasons. There's nothing wrong with nurse practitioners, as far as I'm concerned; I think anybody can be a primary care doctor as long as they've been trained to do

it. But this is essentially about money, and that's not a good reason.

Mullan: The government's interest in nurse practitioners?

Hart: They haven't expressed interest yet, but I'm sure they're going to if they get in again.

Mullan: Let's talk for a moment about ancillary personnel in primary care. What is your view of the future in primary care of the nurse practitioner, the physician assistant, ancillary workers?

Hart: Well, I think there are two possible futures for them. If the commercialization and industrialization of care continues, then we are certainly going to see, like you do in any industry, see de-skilling, dilution of skilled labor as far as possible, all in an attempt to reduce costs.

Mullan: What do you mean by de-skilling?

Hart: I mean, for example, that it is a fact that patients talk to a computer more honestly than they do to a doctor over certain questions. They will talk about their alcoholism or about their proclivity to thrash their wives or about deviant sexual behavior and so on more easily to a computer that asks questions and you just type "yes" or "no," because the computer is nonjudgmental and because in cold blood you can write out computer questions that are, as far as possible, polite and not intrusive, and that

give polite replies like "That's interesting," and so on, and will even say "Thank you," and, "Gee, that must be hard for you."

In that respect, the computer is superior and works better than most clinicians. I don't think that in itself de-skills health workers; on the contrary, it extends the power of the person who handles the results. But if industrialization/ commercialization continues, I don't think that's how the computer for interrogation will be used; it will be used, in fact, to speed the doctor up, to make him able to just sit there, "Well, your score is so and so. Therefore, I take such and such a decision." I think that's de-skilling.

Mullan: Is that a pejorative concept to you?

Hart: Yes, absolutely.

Mullan: Let me argue the other side of it for a minute, mostly for combative purposes, as opposed to--it can be argued that there has been a constant propensity to move activities up the scale of specialism and also up the scale of training time and to move professionals up the same scale. That is, that it is better in the minds of many to have a specialist do Activity X than to have a generalist, and it's better to have a generalist physician than to have a nurse practitioner, and it's better to have a nurse practitioner than a nurse. How the proper level of skill that is required for Activity X is determined is often not objective, but is more in a tradition as heavy business orientation to it, then gets ossified.

In the United States, there's a great emphasis to try to rescue from specialists activities that they shouldn't be spending time on, either because their level of training doesn't require it or because they're not really well trained to do it; it's better done in the hands of a generalist.

Hart: Let me ask you a question. In this hierarchy you've just described, it sounds as though you think that a nurse practitioner is more of a generalist than a GP, than a doctor. Is that what you think?

Mullan: No, I don't. I do think that there are certainly thing that generalists do--and I go back to my own pediatric experience. A lot of the routine pediatric exam, including the preventive and health promotion and health education aspects, that do not require, in my judgment, four years of medical school, three years of pediatric residency.

Hart: Right. Let me answer your question, then. I don't recognize your set of assumptions in the situation you described. It might describe something that happens in America; I don't think it happens here. It might happen in a hospital, but it doesn't happen in general practice. We're in a very strange position that I think really anyone who looks at it carefully would have to agree, that at the very best, nurse practitioners aren't generalists; they're more specialized than general practitioners.

General practitioners, or primary generalists, are people who are sitting there at their desks, waiting for the door to

open, and they don't know who the hell is going to come through. They do know the people who are going to come through, more or less, give or take 5 percent; they're going to be people they know, but they don't know what they've got.

I think common things occur commonly, but a new lymphoma happens once about every ten to twelve years for a GP with an average-size practice in this country, and that's got to be recognized. That is not in the range of ideas of a nurse practitioner, except insofar as she's got a slot for, "I don't know what the hell is going on here." Now, of course, GPs have that slot, too, but I think GPs, on the whole, partly from training and partly from experience, they've got more knowledge of what's in that "I don't know" box and what the threats are.

In the end, if you really push it, there is no way of defining the work of a nurse or the work of a doctor that provides really stringent criteria for separating the work of the two. I believe that the future of primary generalist teams is that the doctors will adopt more and more of nursing attitudes and nursing skills and, to a rather greater extent, nurses will adopt medical attitudes and skills.

I hope that eventually we will destroy completely the tradition of nurses' blind obedience, which is very, very difficult to get rid of, all the more so because nurses are quite proud now, and the nursing profession is quite proud, of the fact that they follow guidelines better than doctors. Of course, that's true. It's true partly for good reasons: they are less myopic and less egotistical about where they work, but it is also true that they're less thoughtful about the way they work. They're not critical; they're trained in obedience. And they

don't feel that they have to be able to explain why they do something; they just do it. Someone else told them to do it who's got more authority than they have.

Doctors can also take that view, but on the whole, you can challenge a doctor and say, "You're behaving like that, and that's not the way doctors should behave," and they have to admit that that's so, whereas nursing professionalism remains slavish. In its desperation to achieve professional autonomy, it's adopting many of the worst features of medical professionalism. Some of the degreed nurses are being trained in very theoretical ways that don't relate to practice. There begins to be a gap between what they know and what they do.

Recently, there was a guy telling me last night, who has been involved in teaching nurses how to measure blood pressures critically. He found that degreed nurses, university-degree nurses from a good degree course, when he asked them what the divisions in the mercury column were, what they represented, first of all, they didn't know that these millimeters of mercury that people keep talking about, that this was actually a ruler; they didn't think like that. They just kept saying over and over again, "So and so millimeters, MMHG."

Then when he asked them, "What does the mercury do?" most of them thought the mercury level was there as an indicator, like a dial or something, but they didn't see that the actual weight of the column of mercury was doing something. They think in terms of TV gadgetry where it's all a mystery, and they didn't understand the simplicity of a sphygmomanometer, which means that they won't appreciate the importance of leaks, cuff size, and all sorts of other very practical problems.

Although I always had a lot of ancillary staff, I never, ever used them as first-encounter generalists except if patients had chosen, themselves, to do that. If patients took their own decision that their problem was one that was appropriate for the nurse, not the doctor, then I think they're right. There will be a few women who will see the nurse and not me. This never actually happened, but it could have happened, that a woman with a lump in her breast, which she's not able to talk about to me, is able to talk about it to the nurse. She might talk about it to the nurse in a way that some people talk about it to me; that is, to come in about something else and then refer to something or other in their chest, and if the doctor examines them for that other thing and finds the lump, then that's all right to talk about it. And if he doesn't find the lump or doesn't look for it, that for a short time sustains their continued hope that if the lump had really mattered, he would have looked for it and would have found it. Of course, that could all happen with a nurse and not me, and she's got to be trained to deal with that.

But on the whole, I felt that where patients had not chosen, themselves, to see a nurse rather than me, for me to say that nurses will do all my first encounters and then they're going to sort of triage or refer people to me where they think that's necessary, I don't think that's progress.

The only area in which I did do that was my blood pressure clinic. I had a combined diabetic and hypertension clinic, for good reason, and that is that a lot of hypertension is causally associated with a lot of diabetes. The variables that you're looking at, that you're tracking for follow-up, are virtually the same. The educational package is the same. The cardiovascular

risks are the same. It is, in fact, a vascular clinic. None of the diabetics die of diabetes; they die mostly of coronary obstructions and so on.

I think that this is a case where the two kinds of clinic doctors and nurses are going to merge, and in that clinic I didn't see all the patients. We had the clinic once a fortnight, and the patients came back every three months and they would see the nurse, and she would measure their blood pressure, check various things that I'd asked her to check. But I found that nurses were not actually very good. I mean, obviously I'd only got two nurses, so I can only talk about them, but they were very contrasting personalities, both very intelligent. I found it very difficult to get them to work critically. They tended to work faster than they ought to have done. They worked rather like GPs who haven't learned yet that they don't have to work fast anymore if their case load is small. My unit was always set up so that the case load was small enough that we weren't having to do bad work. Many GPs had a habit of always saving some time, because they were always going to have another emergency, and if things were reasonably all right now, that was only because the terrible time was coming in half an hour, so they always wanted to have some time in hand. My nurses were like that, too.

I found that changing the culture of nurses was very difficult, and I don't think they should be given first-encounter responsibility until you're sure that you have changed that. We need a nursing or nurse practitioner training program that gives them all this from the start (I don't know, perhaps now they are taught this). I had a bookshelf full of books behind me, and whenever there was a question that a patient asked or that I

asked myself, I would turn around, get the book out and look it up in front of the patient. I felt that this was a very important educational move; I wanted the practice systematically to learn that I didn't pretend that I remembered everything, but that all the time I kept being surprised at what I rediscovered in the books. A lot of them were books that, anyway, I've never sat down and read from cover to cover because we just don't do that with a textbook. But you must replace your textbook about once every five years; otherwise, you've got yourself with a 1973 textbook of medicine (like my current successor).

I don't know, it's possible that nurses would work more self-critically, but mine didn't. I found a certain anti-intellectualism in both my nurses. They were working-class girls who were partly chosen for that reason; I didn't want snobby nurses. I wanted nurses who were good at relating to the local people. We had a few snobby nurses available, but we didn't have any middle-class people available (in the UK sense).

Mullan: The experience in the UK, which is so rich with nurse midwives, where that field has been essentially populated by nurse midwives, as we were talking before in the services, in obstetrics are largely nurse midwife-managed, is that instructive in any way to what might go on in medicine here or might go on elsewhere?

Hart: Well, yes, it is. There is another instructive group--diabetics. I always use diabetics as an example. Whenever people said they couldn't do this and that, I'd say, "Well, yeah, but if a child of eight gets insulin-dependent diabetes, they

either learn how to manage their diabetes, including giving themselves injections and testing their blood and all sorts of things within about three months; or they're dead. So if they can do it, we can all do it. All we have to do is have training." That is true. The diabetics are specialists in diabetes and in themselves, but that's the limit to their specialty, and they know the package they're dealing with more or less, know more or less what to expect.

I find it really difficult, I think because I felt that I was in a very isolated position to say it, I felt that my work as a generalist was in many ways more difficult, more responsible, more uncertain and dangerous, a bigger mine field, than being a specialist in a hospital, because a specialist was always surrounded with so many informed critics.

Mullan: I understand that. I agree with that.

Hart: And I think that's a very difficult thing to transmit to your own staff. We are lucky to have schools where midwives are trained by experienced midwives, because it's an ancient tradition, but most of the other things, we've got practice managers who are not being trained by practice managers; they're being trained by women, mostly, and people from the business school and so on, who've got all sorts of the component skills that are supposed to be part of the package of being a practice manager, but they've never been a practice manager. So they don't really know how to deal with the problem of patients who come in and shout at you and tell you to fuck off and things like that. They'll have a psychologist who will come in and tell you

what you should do, but this psychologist has never been a practice manager.

I feel that these teachers of tasks they have never performed lack conviction. They can't be all that confident themselves in what they're teaching, because they know they haven't done it. So we're having to create a first generation of nurse practitioners taught at best by practice nurses, who are different group here. We've got a lot of practice nurses who start off with a job description, because if you're any kind of an employee. You give a job description with their contract. But in reality, the content of their work changes each year because they gradually learn to do more and more things. A good doctor/employer makes sure that they have new things to do, because they've got to be kept interested in their work.

One reason I had to have nurses was that I was dispensing, and somebody had to do the dispensing, and it wasn't going to be me. But dispensing is very boring. You don't even mix up medicines anymore; it's just counting tablets and so on. I knew they didn't like doing that, so I had to ration the work so that, first of all, I did some of it so they could see that I'd been there. I had to make sure that nobody got specialized in that.

I had to make sure that I referred enough of my patients to them, that my nurses were used for referral. The standard interview sequence for a complicated case--and I'd say perhaps one in five of my consultations was complex and difficult diagnostically and involved examining people and doing various tests and having to think several times about what was wrong and give them an opportunity to think several times about what they wanted to say, so my structure for that--and I had bitter

arguments with my last partner Brian Gibbons about this, a matter of controversy in the practice, I thought it was a good thing to break up the interview.

The patient comes in, the standard question, "What's up?" They start defining the problem. We've got some set of initial hypotheses. I say, "Well, go and see Margaret. She'll get you undressed next door and I'll come along and examine you. I'll see another patient while you're getting ready." So there's an interruption.

There's another patient comes in with another set of problems. Then after that patient, Patient B, I go in to see Patient A again in the next room, with the nurse. She's had a bit of time with the nurse, so she may have talked to the nurse. I examine her and do what I can do, and then I say, "I'm going to go and see another patient," Patient C. "Margaret will get you dressed again," and so on. She may talk to Margaret again then.

Then after I've seen Patient C, A comes back in to me, the third time. She's had three chances to reformulate how she wants to define her problem or how she wants it to be tackled, and I've had three opportunities to do that, too. It gets easier and easier for me perhaps to say, "What do you think is wrong with you? What was in your mind?"

The nurse is participating in this, and I can either talk to her behind the patient's back, or more often discuss the problem with her in the consultation while the patients is actually there. I used to teach the nurses a lot during the consultation because it was a way of talking to the patient, but also I wanted the nurses to think clinically.

Brian was against this because he said, "You won't have a continuous stream of thought and it keeps getting interrupted, and I felt that was actually what was most positive and important. This isn't a woman who's come in who says, "I've got burning when I pee and it's got blood in it," and so on, straightforward, a relatively easy thing; this is a difficult thing. And for difficult things, we don't want a smooth passage; we want several bites of the cherry.

I found that if I went through a whole session without one of those complex cases, I always used to feel, "I've failed the nurse because that's what she really likes about this practice," and I knew from feedback that that was true. They hate the new doctor they've got now, because he puts them on permanent dispensing. He's shoved up the practice prescribing costs per patient from 20 percent below area average to 25 percent above area average, because he makes more money that way. He's just using his nurses to make money.

Mullan: I want to move beyond the nurse issue, if we could. Let's come back to the big picture. As one approaches the general practice here in England, there are a number of names that come to mind immediately, most of whom are of your generation, kind of the pioneers of, as I understand it, the revitalization of general practice. Nobody, in my brief chatting, has begun to offer me names of people who are forty-five or fifty years old representing intellectual and professional leadership of the next generation. Is that a quirk in my rather unscientific survey or is it true that there are not

the kind of giants or leaders, universally acknowledged leaders, emerging or developing on that level?

Hart: I think some of it's a quite false impression. We all think that there used to be giants like FDR [Franklin Delano Roosevelt] and [Charles] de Gaulle and [Adolf] Hitler and [Josef] Stalin and so on. Great figures were created partly because there were deserts all around them, partly because the media created that desert. We don't think in those great hero terms anymore, and that's a good thing, it represents democratization in the world.

Mullan: Fifteen years ago when I came to the U.K. and I said, "Who should I talk to?" people said, "Tudor Hart, Horder, Fry." Fry is no longer with us. People say today "Tudor Hart, Horder, and it's too bad Fry isn't with us." I'm not picking up on names of people who are fifty-five years old.

Hart: No, but I think Marshall Marinker, all three of them--John Horder, me, and perhaps half a dozen others--are the sort of De Gaulle and Franklin Roosevelts of the renaissance of British general practice.

Mullan: I'm glad you left Stalin out. I've got my leftist leanings, but I'm glad you left Stalin out.

Hart: But he's a big figure and Hitler's a big figure. I am very impressed with a lot of younger GPs. David Metcalf should have been one of your people, too.

Mullan: His name did come up. How old is he?

Hart: He's about my age, too, but I'm saying he ought to have been included.

think one reason for what they're saying is that all those Ipeople you talked about were big College figures. The College is not that big a deal now; the College isn't doing anything. It's rotting. It may go the way of other Royal Colleges. The Royal Colleges, in general, are no big deal. God knows what the Royal College of Surgeons and the Royal College of Obstetricians and Gynecologists and the Royal College of Anesthetists and so on actually do; I don't know. Most of them just have very posh premises somewhere in London, hand out medals and things, prizes to their most esteemed colleagues, and, in general seem to do little to advance their subjects.

The College of GP seems to be sliding in that direction. The College has had three phases in its development. There was an initial heroic phase where it didn't have any government support. It slipped in at a time when the BMA retired, licking its wounds, after it had made a bloody fool of itself by opposing the National Health Service lock, stock, and barrel, and then finding that the Service was not only extremely popular with all patients, but it was actually pretty popular with doctors as well. Now, after a long interval, the BMA has started simply rewriting history, saying that they never did oppose it anyway, and this was all a big misunderstanding. But at the time they looked absolute idiots.

Mullan: Let me ask directly, are there leaders coming along? If not, does that represent something diagnostic about general practice that I ought to know about?

Hart: Yes. The diagnostic thing you've got to know about is that general practice by itself can't do very much. I'm really not digressing; I know it sounds like it. The College stepped in because the result of the Collings Report was that it exposed an appalling state of affairs in terms of clinical quality for general practice. It wasn't describing the state of affairs caused by the National Health Service. The Collings Report was in 1950, when we'd only had the Service for two years. It was really describing the situation revealed by the National Health Service, because for the first time we really began to look at what was happening, what had always been happening in general practice.

The College essentially looked backwards. It had a sentimental view of family practitioners, but it did accept and even welcome the National Health Service, and it was the only "establishment" organization that did that. So the pioneers of the college were an extraordinary bunch of people, some of them real antiques; the reason they supported the College was because they believed in general practice and their idea of a general practice was a doctor who did everything, including surgery and so on. It was an obsolete idea. It wasn't primary care; it was *omnipracticien*.

Then there were the people in private general practice, actually quite a large number of those among the founding fathers, a virtually extinct breed now, and there were a whole

lot of left liberals and liberal-lefts who were politically committed to general practice because that was the bottom of the heap. The bottom of the heap's got to be more important and more fundamental than the top of the heap. People like me, but a generation older. That was the first lot. They had absolutely no government support and they did everything by pulling up their bootstraps, but they had quite a big infusion of energy because nobody else was doing it, and the BMA had bowed out. The BMA opposed the creation of the Royal College of GPs, because it was a potentially rival organization, but they really couldn't do anything about it, they were in such a weakened state themselves.

The college was beginning to go down the drain by the mid-1960s. The state of morale in general practice, which was described by David Mechanic and other people, was simply appalling. It was then that the Medical Practitioners Union came along, offered its prepared plans to BMA, and Jim Cameron, Sir James Cameron, who led the BMA at that time, had learned from the bitter experience of the BMA in 1948 and had the intelligence to adopt the Medical Practitioners Union's policy, which we (the MPU) were quite willing to let them do, and the result was the Labor government--Kenneth Robinson was Minister of Health, who was a GP's son, so he understood a bit about that.

They negotiated the 1966 package deal, (the 1967 GPs' charter) which was the turning point for British general practice and for the College, because it created the trainee system. It was paid for. It gave government money. We got Nuffield Foundation money for the postgraduate medical centers, which were built in all District Hospitals. We got course organizers paid. We got protected time. It stopped being all a matter of

exhorting people to give even more of their spare time, which didn't exist, to do all sorts of good things that ought to be done. It professionalized teaching at least to some extent, so the College grew by leaps and bounds, because it had a task to do, which was to accept responsibility for developing the trainee programs all over the country.

Mullan: The College was founded in which year?

Hart: 1951 or '52, something like that.

The College did that, and unquestionably in the early days it was the College entirely that was responsible for providing the trainee framework, and it gave the College great confidence in itself. But the trainee system, once it was really established and self-replicating, got more and more non-college people coming into it. They didn't really need the College to keep going; they'd become self-sufficient. They'd learned how to do it. The College failed to take on a new task.

During the time that I was on council--

Mullan: You were promising to come back to my question. The question was, what has happened to the younger generation?

Hart: What's happened to the younger generation. No, I think the younger generation are there, but they don't have a task, because the college--

Mullan: This is the second of February 1995. This is the third tape. This will be the fifth side.

Hart: I think, to get back to your question again, if that's what you want me to do, you've got to remember that I think there's only one British medical school now that doesn't have a Department of General Practice; that's at Bristol. They've nearly all got chairs. So that means there are a lot of GPs doing things now, publishing, lecturing, researching and so on, which at one time were done by pitifully few. Now lots and lots of people are doing them. There are more of them, and that means that they don't stand out so much. That's the Roosevelt and De Gaulle argument. But I think the other thing is that they are actually not innovating very boldly because they don't have a vehicle for bold innovation.

Donald Irvine and John Fry, who both had essentially the same program for the College, for the future of development general practitioners, essentially their scenario was that general practice should shake itself up more and more by becoming more and more businesslike, by not pretending about things, by taking an increasingly savage attitude to bad performance in general practice, setting standards and ensuring they were all met, and continually saying, "We've got to do so and so, because if we don't, the government's going to make us do it. We'd rather do it for ourselves." That was their general line of talk, quite plausible, generally fitting in with the expectations.

That has been taken a hold of by the present government and used. Donald Irvine has his knighthood. John Fry is dead, but he supported all these changes and essentially they fit in with the logical consequence of what he always thought. I liked John, he was a very tolerant, polite person, but he partly achieved

that by never listening to what anyone who disagreed with him actually said. So I can't say that I ever engaged in dialogue with John. I suppose we just agreed to disagree and that was it. I think he was in many ways a Philistine about general practice. He had essentially surgical training before, and I think that showed. He was always simplifying things. He was always talking about common sense. Common sense is great, except when you're in a time of real choice, being told that you should follow the middle of the road when you've reached a bifurcation isn't much use. You really do have to choose which way you're going to go, and I think he missed the point.

John Horder is in a different category altogether, because essentially balance between art and science is his big point of departure, and that's still where he's at. That is right in that balance is about the human quality of doctoring, which doesn't say no to technology, but regards it as a secondary question, which I think is right. The fact that some gadget can do some fabulous thing still doesn't seem to me to technicalize medicine at all; it just makes it easier for us to concentrate on the human part. John has never connected with plebeian political realities; he is every inch an aristocrat. He is very socially responsible, but essentially a top man who worries about bottom people, but I think in essentially a very paternalistic way.

Mullan: You said philistine about John Fry. How do you mean philistine? How does that play out?

Hart: John was a kind of anti-intellectual. He didn't like theory. He loved to simplify things. His book, *Three Worlds of*

Medicine, comparing the United States, the Soviet Union, and Britain, is a lovely, simple description of the three systems that really makes them memorable and easy to understand. The only trouble is that actually the systems, all three of them, are actually terribly complex, the American system chaotically so. That doesn't come out.

Mullan: I understand.

Hart: Of course it doesn't. He's like some pharmaceutical rep who tries to explain to you angiotensin or the coagulation system and you think, "Oh, my God, isn't that wonderful? At last I understand it," but the only thing is that he's lying. Reps from drug companies, are wonderful specialists in fairy tales that suddenly make incomprehensible biochemistry simple and memorable, but they're just lying.

I think we've got a whole lot of brilliant people. We have got a few very outstanding figures who will unquestionably be great men in general practice. Graham Watt, the professor in Glasgow, is going to be a great man. We've got a number of pygmies in quite high positions. I mean, being a professor of general practice is no guarantee of genius, no. But we've got a lot of very good people.

We had a brilliant entry into general practice between the late sixties and the late seventies. We had a long period in which the sons and daughters of professors of medicine and surgery were saying to their dads, "I'm going to be a GP," and the dads would be furious. "How can you throw yourself away like this?" They said, "No, I'm going into a much more exciting and

demanding specialty than yours." There was fury throughout the consultant establishment during that time. Their interpretation was that young doctors had gone into general practice to get rich, because that was their interpretation of the differential between the earnings of GPs and the earnings of consultants being narrowed, (of course they never met). There are a few rich GPs in some areas who are richer than the poorest consultant, but there's a very, very small overlap. In general, consultants do earn a lot more than GPs. But they intensely resented any narrowing of the gap, so they accused these kids of doing that, which was absolute travesty.

But their kids had grown up hating hospitals, and often actually disliking the medical culture in general, feeling that in general practice they could somehow redefine it. We've got not a lot of examples, but a few examples of work-sharing and things really quite imaginative, that are possible in general practice, that are unthinkable in hospitals. This generation will certainly produce its own giants. Graham Watt is one, Iona Health is another, there must be at least 30 others.

My guess is, the Labor party will win the next election. I think we have a fairly good chance that like last time, like 1945, the Labor party will be too weak, too confused, self-doubting and apologetic and inclined to grovel before Wall Street and its equivalents over here, to actually achieve very much change in the rest of the economy except perhaps in education and possibly housing.

But in medicine, in health service, I think we've got a good chance that we'll make a lot of progress, because they are not so

frightened of political innovation in that area. They still see it, wrongly, as an essentially nonpolitical area, a consensus area. It is, but only in the sense that the Conservatives isolate themselves by the attitude they take to the Health Service.

There really is a world of difference between us and you in this respect, this feeling that's been shown over and over again in opinion polls that whereas British people overwhelmingly regard free medical care as a human right (and really, rich people think that, too, there's very little difference, actually, between Tory voters and Labor voters about that attitude) whereas in America, that is definitely a minority view.

Mullan: Would Labor roll back fund-holding?

Hart: We (Labor) are committed over and over again to abolishing fund-holding. The big problem for us will be that all health workers are fed up with big organizational changes in the NHS. They long to be delivered from the commercialization of the NHS, but on the other hand they also want a period of sitting back without major organizational change. We are going to have to be very clever about the pace of change and particularly the perceived pace of change. We have got to change quite quickly, because competition is not cost-effective, and the only way to set limits to extravagance is to return to cooperation, which will save us money. We are going to have to save money, particularly if we're going to have big innovations not only in clinical medicine, where they're not actually that necessary, I

don't think, but in social services and long-term care of chronic illness, which are very necessary indeed.

I don't think people in the State realize the scale of change here. The Department of Health doesn't keep such statistics on hospital beds anymore; that is the job of the hospital trusts which are allegedly independent and not elected by anybody. So they don't keep records of long-stay beds or acute bed`s and so on. It's their business; it's not the Minister's business. They are independent businesses; it's their job.

So when the Minister is asked questions in the House of Commons, she can't answer them, but the *Guardian* newspaper did a telephone inquiry through two hospital regions in England, in 1993, a big inquiry, and found that in those two hospital regions--and there was no reason to think that they were not typical, except that they weren't in London, where it would have been worse--there had been a 40 percent reduction in long-stay hospital beds. That includes long-stay geriatric beds and long-stay psychiatric beds. But a 40 percent reduction between 1988 and 1993.

The Alzheimer's Disease Society--

Mullan: Before we get into that, because we're getting a little off the point--I'd like to come back to that, but not on tape--to round it out, on the future of general practice, on the future of generalism, in general, where would you see it going? If you were looking at this twenty years from now, speak first of the U.K. and then of, say, the Western world in general, the whole world, where do you see it headed?

Hart: I don't know about the rest of the world, but here what I see heading, I think we are going to think in much more physiological terms than we have. You know the way that high-powered clinicians talk on ward rounds, expressing all their ideas about diagnosis and disease and so on in terms of disordered physiology, the test of whether you're already a good, proficient, human biologist is whether you can describe it like that rather than, "She's jaundiced, sir," and that kind of thing.

I think that's going to dominate primary generalism. We're going to think in biochemical interventions and to some extent surgical interventions. We're going to demand a much, much higher level of knowledge and a much greater capacity to think critically about what we're doing to people. I think we'll look back on our current biochemical interventions as being as reckless and high-handed as tipping mercury, lead and arsenic into people in the last century, which we did on an enormous scale.

I think at the moment we work in a pretty irresponsible way. The first step in rescuing us from that will be to apply randomized control studies, to a much wider range of medications and surgical interventions, and it's all-causes mortality that matter, not mortality from the target disease. The target disease mortality, it seems to me it may be interesting to the doctor, but not very interesting to the patient, who is interested in being alive and not dead. So, for example, this tremendous effort on coronary disease, ignoring everything else that's happening, I think is ridiculous.

I think we're going to have a huge shift away from disease labeling, which is mostly about end-stage disease; we're going to

take on board data we already have, which is not generally appreciated. There's a big study population in Paisley Renfrew, in Scotland, where they've been tracking people. Victor Hawthorne--do you know him?

Mullan: No.

Hart: He's a Scotsman. He went to Ann Arbor in about 1965, something like that, but he had set up this huge prospective study in Scotland where they were looking at all the usual cardiovascular risk factors, but they were also looking at respiratory function. They found, as we predicted, actually, that respiratory function tests were even better than all cardiovascular risk factors at predicting how long people would live.

It doesn't matter to people what they die of so much; what matters is how long and how well they live. I think we're going to go back to a much more generalized idea about ill health. We're not going to be interested in labeling people as chronic bronchitis or with emphysema or angina or whatever; we're going to think more and more about them as more or less sick people with a number of different variables that are a rough way of approximating the function of different body systems, but we're going to look at people in a much more complex way, and for certain purposes, the old qualitative labels will be useful to specialists. But they won't be the bread and butter of community generalists.

I think we are going to have resident human biologists, which doesn't mean that they have an inhuman or technical

approach to patients, just seeing them as biological specimens; I think they will appreciate the richness and complexity of human biology that includes psychology, sociology, and all our functions as self-conscious social animals with a sense of history. But I think we will have a huge educational function that goes beyond health education, in the sense of people knowing about their diseases and so on, and will go beyond advocacy, where we will be needed to guide people around the terrifying maze in hospitals and specialists. I think we will have a social stabilizing function, which I talked about earlier. I think health centers will be developed as a kind of anchorage for otherwise unanchored communities. I think the doctors will still stay in one place longer than any other professional person, I hope, and start putting roots down in their communities.

I think the best thing that ever happened to GPs in this country is that we were thrown out of hospitals; we weren't allowed to work there, which was very bitter for the GP surgeons that were chucked out, awful for them, but the best thing that ever happened to us as a professional group.

When I've gone to the States, what really makes my heart sink is to see really quite good family doctors, when they want to show me something that will impress me, take me to their hospital, on a ward round where they show me half a dozen cases, every one of which illustrates that they did the orthopedic better than the orthopod, they did the cardiology better than the cardiologist, they did the respiratory illness better than the respiratory physician. In fact, it turns out that they're not generalists; they're omnispecialists. They know every specialty.

Even if I were to believe that they were this unique sort of person, I know I couldn't be like that, and I think it's terribly sad, that American GPs don't seem to be able to get enough self-confidence out of their ambulant care in the community and home care of sick people, some of whom are terminally ill. It's awful that they have to go back to the hospital and get a lift out of that.

I remember doing that when I went back to hospital after my five years in general practice in North London. I got a lift. I thought, "Oh, I'm back here in the sort of thing I was trained to do." I remember really feeling elated for a few days. I just think it's ridiculous. There are so many people doing that. I suppose partly I'm simply answering your earlier question I didn't answer properly, was that we really were entering a new land, discovering. It was very exciting, thinking you were on the leading edge. Now, I feel that I still am on the leading edge; I think it's still advancing. It's a very vain thing to say, but I think I've continued to move ahead when most of the rest of the College people are not moving ahead. I think they are sitting back.

Mullan: We're now at February 3, in the morning, in Dr. Tudor Hart's dining room, just finishing up with some questions. The first I'd like to ask, Julian, is tell me a little bit about your observations over the years about the use of money in general practice and your concept. I know that you've pioneered about the GP as medical shopkeeper. Then I want to talk also about what's happening now in regard to the same question.

Hart: The term "shopkeeping" has always been used, essentially pejoratively, in that we felt that the way the doctor thought of himself was like a shopkeeper, not like a scientist. A consultation in British general practice, certainly up to the 1940s or '50s, meant almost invariably a lot of medicine. You just never saw a patient without prescribing something. Most of the doctors dispensed themselves, from a great big jar of concentrated red medicine, white medicine, black medicine, whatever. They went over to a tap and diluted it to whatever it was, stuck a cork in. That went to the patient, and if the patient didn't get medicine, then it wasn't recognized as a transaction.

That was also an important part of the GP's living, and that mentality continued, and it did sum up quite accurately the sort trivial nature of the diagnostic effort made by most doctors. Of course, these things were interspersed with occasional episodes of acute obstetric emergencies, acute abdominal emergencies, fractures, and so on, real medicine shoved into the ailments. It was a sea of ailments with little islands of clinical experience, and the ailments were just treated with rubbing something on, cough medicine, and so on.

When medicine ceased to be so impotent, after about 1935, with sulfonamide and so on, and accelerating with penicillin and more powerful antibiotics, the scene changed, but, still, the setting remained more or less the same. One feature of shopkeeping we didn't have was that there was never any very active soliciting. There was some active soliciting of customers. People wanted registered patients because their income depended on it, but then having got the patients, they

weren't particularly interested in them coming a lot; in fact, quite the opposite. What you needed in our kind of shopkeeping was as many people registered at the shop as possible but making as few visits as possible.

This was a huge difference between British medicine and not only American generalists, but French, Dutch, and everybody else, because they were all getting fees for each consultation and we weren't. A lazy British doctor did too little and a lazy American doctor did too much, if you see what I mean--or a greedy one. Lazy-minded and greedy.

So the change that's taken place now, although there's a much bigger fee-for-service element and there have been a lot more carrots and some sticks introduced into the whole management if general practice, and a commercial attitude is being encouraged by the NHS "reforms", much more competition between hospitals, but even now it wouldn't be recognizable by an American doctor as a process of commercialization, because we were so far removed from commercialization. For us it's a huge slide towards commerce, but I don't think many American doctors would see it that way. They still think this is a socialized service.

In fact, it's true that the government is having very, very great difficulty. They promised it will be a social service; they promised absolutely in the last general election that it will continue to be free at the time of use, that there won't be any consultation fees. People are charged for medicine quite a lot now, but they're not charged anything for the consultation itself, and it would be very, very difficult. That's a promise

they really can't renege on without a general election to legitimize it.

So the government is, on the one hand, trying to encourage a more and more commercial attitude. What one minister said, they want the NHS to be businesslike without being a business. In fact, that is almost impossible to attain. The more businesslike you become, the more like a business you are. So I'm sorry I can't describe it really neatly, but I think Enthoven (the inspiration of our "reforms") has been quite insouciant about all this. I think he sees our health services very much as, "Oh, wonderful. This is a public service. It's not just commercial." I think he likes that because he's not a medical businessman himself, and he doesn't realize that probably, not being a very thoughtful man, how much he's introduced greed into our motivation. He thinks it's a natural state.

Mullan: What has fund-holding done to the behavior and practices of general practitioners?

Hart: Now roughly one-third of all practitioners are fundholders. It's not an option open to small practices, although they keep lowering the population threshold, to get more in. The really big difference is that they are responsible for data collection and a whole lot of office information systems hassle, which ordinary GPs just don't have. They are helped in this by the government. There's been a huge investment of money into GP computers and so on, which now have to be for cost control in the new market system. Before the "reforms" we were more computerized than doctors anywhere else for clinical care.

Although very few American doctors, I imagine, don't have a desktop PC now, overwhelmingly American PCS have been used for billing, for the fiscal management of their practices, and very little use has been made of them clinically. That was not true of British doctors. British doctors were actually a long way ahead in using computers to organize care of whole registered populations.

Mullan: Data collection?

Hart: Yes. Audit here has not meant business audit; it has meant clinical audit, knowing what's going on clinically. Although it is still at a very primitive stage, it is a long way ahead of anybody else. It's still based on primitive labeling systems and tends to tell you how many people you've got with emphysema and so on, or asthma or something, without giving you the thing as a distribution of variables or something permanently useful regardless of labeling criteria. It's a bit like having a list of how many giants and dwarfs you've got in your practice, but no data about the distribution of height. So historically it's actually valueless, until it includes quantified data.

Mullan: But currently computers are being used by fund-holders for fiscal purposes?

Hart: Not just fund-holders. In Wales, it's something like 80 percent of practices now have computers and use them. In Scotland, it's much more than that.

Mullan: You're saying that in the current environment with fund-holding, computers are being used [unclear].

Hart: You have to count things all the time if you get money for them. We think--that is, socialists think--it's a terribly wasteful mode of organization, because we are repeating at a very small population level work that could be done more economically and sensibly at area level. We think you need populations of 50,000 to 100,000 to eliminate the small number effects that are continually creating noise rather than signal. It's making primary care unplannable, even more unplannable than it was before.

We want a movement in exactly the opposite direction; that is, we want GPs to be salaried like everybody else, so that their work can indeed, like Enthoven says, be managed. We're not against management. We want management allowing doctors very considerable autonomy in their clinical decisions. For really full autonomy, that means they've got to be well-resourced, because unless you're well-resourced, you have no choice. You've got to have enough time. It's got to be sufficiently labor-intensive, and people mustn't be pestering you all the time to reduce the number of staff.

Mullan: Does fund-holding result in underutilization of specialty services? Are GPs being incentivized not to refer?

Hart: Yes, they are. They are incentived to be more savage as gatekeepers in one way. On the other hand, because they're guaranteed priority for hospital referral, the hospital, as it

approaches the end of each year and the threat of bankruptcy favors the patients of fund-holders, even when they don't want to. They have to do that because it's the only way they can get money in. Money comes with the patient with the fund-holders but not with other GPs.

The whole Enthoven system of attaching price tags to everything means, first of all, huge bureaucratic overheads, because all these things have to be measured and counted. To the extent that any system is commercialized and medical procedures are turned into commodities, the commodities will promote themselves. We've got 20 percent of postmortems showing people with gallstones, of which perhaps 5 percent are clinically important and are an indication for surgery. There is very wide latitude for decisions. All surgery rates for common procedures are at least double in America what they are here. The assumption in America has been that we are underproviding and our assumption is that you are overproviding. Liberals say it must be somewhere in the middle. I'm not so sure.

On gallstones, there was one large rather old British study, which is the only one that's ever been done in the world that showed a match between the number of gall bladders coming out and the prevalence of clinically important gallstone obstruction. All the others, the studies in Canada, the States, and one other British study, a much smaller study, showed no association.

Mullan: I think we're going to have to close, because we're getting close. Thank you. [Tape recorder turned off.]

Now we're in the car and we're continuing to chat. Dr. Tudor Hart is going to talk about the title of A New Kind of Doctor.

Hart: British doctors serving industrial areas have had, ever since the early nineteenth century, defined populations because they were paid by capitation and not by fees. That meant they got a list of names and addresses, and if they wanted to, they could regard themselves as responsible for the continuing care of that population, not responsible just for episodes of illness, but responsible for whole-person whole-life care. In fact, very few doctors took that attitude, but it was possible to take it and it was possible to think in that way, whereas I find in North America, when I talk to people, they really aren't able to think of it like that. If they're epidemiologists, they can think like that, but then they're not delivering any care themselves.

Here we had a real possibility to develop a doctor who was both providing personal clinical care for episodes of illness and thinking, extending those episodes forwards and backwards, to their origins and what's going to happen next, in a way that's really not possible for people with a floating population, who wander in and out of different medical shops. We could also develop a feeling for planned care.

John Fry got hold of that. He never had any training as an epidemiologist, and his methods were really very crude, but they were effective. He did everything with marginal perforated cards, (Copeland-Chatterson) cards, needle-sorting. This was all based on labels. He never established standard criteria for diagnostic labeling. Actually, his work remained at a very low

level of sophistication and some of it was not very reliable. He tended to think that he'd seen everybody with a certain condition, when he manifestly had not.

Mullan: Let me pick up on that. You said yesterday that epidemiology naturally occurred to people who were Marxist or socialist in proclivities. Tell me a bit more about that.

Hart: Well, we've had two great periods of British epidemiology. The first was in the early nineteenth century when people like Farr, who was the Registrar General, produced marvelous statistics showing a very strong close social-class gradient for a number of causes of death, and used these figures to demand new attitudes in organization from the government to do something about it. This is in the great age of providing drains and getting shit out of the street and so on, and a clean water supply, which was a real struggle. I mean, the vested interests of water companies and so on had to be fought. That was the first great era.

Then it more or less went into eclipse during the heyday of British industry and imperialism in the second half of the nineteenth century, and got rediscovered in the 1930s. It certainly got some energy already then from the Left, which was a very important stream of thought, particularly among intellectuals, university-trained people in England by the mid-thirties.

Then it really began to take off during the war. During the war, we discovered operations research. People like J.D. Bernal, who was very important, a crystallographer, he invented his own

area of activity. He was described by Julian Huxley at one time as the wisest man in the world. He'd got a very big brain. He wasn't the wisest man in the world; he said and did some very foolish things. But still, he was wise enough for one of the world's leading biologists to call him so. He was a biological crystallographer. He was imaginative enough to realize that crystal structures of very complex molecules gave a clue to the structure of the molecules themselves. I mean, if you look at buildings which are rectangular, you might guess that the bricks they're made of also are rectangular. That's the basis of crystallography.

Anyhow, J.D. Bernal, although he was a known Communist, was promoted rapidly during the war to a very high level indeed, in designing operations research. He was responsible for a lot of the research that went into the D-Day landings, because he could look at the problem of landing on beaches and whether tanks would sink in the sand or not, and at what point men should jump out of landing craft with a minimal risk of being shot before they reached dry sand, in a scientific way. He understood about sampling. He was capable of looking at a beach and seeing it having a structure, a behavior, not just imagining deck chairs on it.

This was all a very new idea during the war, and suddenly scientific approaches were applied to a whole lot of completely new situations; not laboratory situations, field situations. The war had not only a real character but also an imagined character. You've got to remember that during the time that the Russians were essentially suffering and winning the war on behalf of everybody else, the society which their supporters imagined they

had (which they did not, in fact, have) became a kind of reality in the West.

It was a far different reality in the East, where we imagined it, but it became a very powerful political force. People thought, "Well, the Russians, look what they've achieved by mobilizing the whole of the people not for profit and personal gain, but for a national objective, a human objective of defeating fascism. We can do that after the war ourselves, and all these lies we were told that you couldn't afford this and you couldn't afford that, look, we damn well can afford it if we really want to." That attitude became quite common in the United States, as well, although it's a period in history that has been forgotten and falsified.

After the war, these ideas became strong in medicine in the minority of people who thought socially about medicine at all. Obviously the great majority of our leading medical figures didn't see any social dimension to medicine, so I'm talking about a small number of people, but they dominated the field. The first chair in social medicine was held by John Ryle, a gastroenterologist in London, who gave up a lucrative private practice and was appointed Regius Professor of Medicine at Cambridge. He found what was expected of him in Cambridge was so limiting and stultifying, so choked up with snobbery and tradition and so on, he really couldn't achieve anything there, so he gave up the Regius Professorship, which was unprecedented. It was a tremendous honor to have such a post; it carried a knighthood and all that, all the rubbish. He gave it up. He gave up his private practice in Harley Street, which again was unprecedented, because consultants in teaching hospitals were not

paid any money; it was assumed that they got their living from private practice. So it was quite a dangerous thing to give it up.

He took a chair that was created for him in Oxford as the first professor of social medicine, I think, in the world. He wrote a book called *The Natural History of Disease*, whose greatest merit was simply in that title. It was a very original way to think about disease at that time, that it had a natural history, and that what happened when doctors started interfering was unnatural. We were out to change the history of disease.

From that beginning, a lot of other people got going immediately after the war partly with the energy and influx of resources that came with creating the National Health Service. That suddenly gave new meaning to a lot of people's work.

Mullan: The actual linkage between Marxist thinking or socialist thinking and a systematized approach to human disease which you might call epidemiology, when you mention that, it made sense intuitively to me, but I was curious to put a finer point on that. In your judgment, what are the thought elements in common that make somebody who has arrived at a left-wing, or a progressive, view of the world also find a systematized approach to disease appealing?

Hart: Well, I think there are at least two things come to mind straight away. They think in a collectivist sort of way; this has demerits as well as merits, but they tend to think in terms of doing things across the board, which can create snags when they underestimate the extent to which problems are actually

individual and personal. That is often how they are perceived by workers. They're often perceived more sceptically by workers than they are by Left intellectuals who have suddenly discovered a social dimension to things.

The other obvious thing is that people on the Left are attracted to serving poor populations, that that's how they think. They think that it's an honor to go and work in an Indian reserve or to go and work with coal miners who are underserved. Altogether, all their ideas are upside down compared with most graduates of medical schools who want to go to nice places with nice patients with "interesting" diseases, with, as far as possible, no problems, and surrounded by other people who wanted the same job. So what merit is there in doing it if you drop down dead and there would be ten other people who wanted to do it instead of you? I think those are the two obvious features.

That was really my own history. I made mistakes. The good ideas I had entailed some bad ideas, among both of which were coal miners. I thought it was a great honor to work for coal miners. I admired coal miners. They are very intelligent people who produced some towering figures, self-taught people, people who have reached a university level of thought and knowledge, but are self-taught, very remarkable people. I never met people to match those sort of people. The tremendous confidence they've got, because they have taught themselves, they've made their own discoveries, they've gone through the shelves in the public library, starting with A, ending with Z, and then they've started again, reading every bloody thing, including a lot of trash.

But they have tremendous intellectual energy, and, of course, those people don't exist anymore, because, on the whole,

they get a college education and they're not any longer self-educated.

Hart: So I thought of coal miners as sort of soldiers of the Lord. I mean this was the side I was on; they were my fellow combatants, and it was a great honor to serve them.

Now, soldiers are all dressed the same, they all look much the same, they all appear to think much the same, and that was the way I originally thought about coal miners. I thought of mining communities as solid communities that all held more or less the same thoughts, which is absolutely untrue. Coal miners, when they're threatened from the outside, all rally together, and their families and wives and so on do as well, and appear just like that, a solid rank of soldiers. During the three major national strikes that occurred in my working lifetime, that was exactly how they appeared to all outsiders, but to insiders, that's not how they were.

To insiders, they were every bit as diverse as anyone else, and I think actually more so in some ways. They were tremendous characters, partly because they all knew each other, so they had room for expansion of character as they worked side by side in conditions where mutual support is very important, a matter of life and death, so they respect each other's individuality as a way of getting on together.

Mary and I, living in the village, got to the point where every now and then we would break loose and go up to some university town for a weekend, and initially it was a great relief to get out of the village, because we were a bit fed up with the same thing all the time and being surrounded by the same

rather limited range of people, but by the time Sunday came around and it was time to go back, we turned back with relief, because the university people were so monotonous and predictable. They thought they were tremendously individual and different, but they weren't; they were all the same. They were not soldiers the same; they were noncombatants the same. [Laughter]

There was a monotony about their ideas and attitudes and culture which contrasted with the diversity that we saw in the village with the miners. Obviously some of this was illusory; I mean, it was just that we knew miners very well by then and we didn't know the university people all that well. So once you're distanced, people begin to look the same.

There are two big tensions in an attempt to be a scientific community generalist. One of them is a tension between your responsibility to everybody and your responsibility to individual people, a tension between a population approach and an individual approach. The other tension is between observing and doing. These are necessary, fruitful tensions which you can't get rid of; there's no permanent solution to either of them.

You remember yesterday I was talking to you about Archie Cochrane and our battle lasting only about a day or so and then I gave up, the idea of setting up within a center of excellence at the periphery, a periphery of excellence, for both patient care and research. Archie ended the argument by saying, "Julian, you've got to choose. You've got to choose whether to be a clinician and an evangelist or a real serious scientist, an epidemiologist, and an accurate, dispassionate observer. You can't do both of those things."

And I said, "Archie, I'm quite convinced that you can do those two things, and we've got to do them."

I can see that there's a tension between those two roles, but it's a creative tension, and we've got to learn how to do it. I really think if I only had one line to sum up what's important to me, it is not to give up on that effort.

Mullan: The roots of that effort, obviously going back to your family and your father's Communism, how has that, as an influence starting in your early life, affected the rest of your career as you see it now?

Hart: Well, it put me in the right place at the right time, setting myself the right objectives, so that was a positive side of it. What was completely negative was that you needed a very strong dose of romanticism to reach takeoff speed at all. I had to get rid of that romance.

Mullan: Tell me what you mean by that exactly, in terms of romanticism required.

Hart: Well, it's a very heroic decision. All right, no one's going to actually shoot you for going to work for coal miners in a deprived area, but, still, compared with the career decisions taken by most of my contemporaries, it was a heroic decision, and that is how it's been seen.

One reason that I'm quite popular, really, is that even people who don't agree with me respected me because I wasn't just talking about what people ought to do; I actually did it. We

really had quite a hard life, and Mary had a hard life and my kids had a hard life. Even though in South Wales there has never been the vicious hatred and contempt for reds that became prevalent in America, we still had a pretty hard time very often, and particularly my kids did. They had a good deal of persecution at school from some of the teachers and many of the other kids. That wasn't their fault; it was my fault.

The trouble with heroism is that it's associated with flag-waving, uniforms, and all the nonsense associated with sending young men off to war to be killed and to kill other people. I hate all that. To me, the central feature of romance, romanticism, has always been military. I don't think it's about love and beauty and all that; I think it's about uniforms and martial music and stirring tunes and so on.

Mullan: But as Communism has played itself out in recent years, state Communism, how does that leave you feeling about the movement which has obviously been critical to your personal and intellectual life?

Hart: Well, it hasn't been too difficult for me, because I was prepared very early on. I left the Communist party in 1956, over Hungary, and then I rejoined about five years later, because I couldn't see anything else to do. I was then quite hopeful, with [Nikita] Khrushchev still in power, that we were actually going to recognize what was wrong and put it right. I thought that the attempt at primitive socialism in the USSR and China and so on, that they had possibilities for internal development and reform.

That was quite wrong; I mean, those possibilities did not really exist.

I was also prepared because I became a big fan of Bertolt Brecht. The play "Galileo," I think contains in a very condensed form all the most important and powerful arguments about the social function of science and has tremendous lessons for doctors as the most popular scientists that we have, the people who can most easily popularize science and bring it down to an everyday level. Brecht had a very sardonic, very long-term view of Communism. The attempts to discount him--there's been a big book just published recently on him, really trying to destroy him completely, saying that all his plays were written by his various girlfriends in return for sexual favors. If Brecht was so sexually attractive that he could get these people to write such marvelous plays, well, who bloody cares? It's rather like arguments about who wrote Shakespeare. I don't care who wrote Shakespeare, but there was somebody around who wrote absolutely fantastic stuff. I'm really not that interested in who it was. Well, the same thing goes for Brecht's character.

He seemed, to me, to grasp the essence of what's really important in what Marx was saying about looking for contradiction, about how if you don't have contradiction, you don't have good drama. Real life is contradictory. It is a natural, observable, and feelable fact that if you're always aware there's creation going on, there's tension, that you look for tensions between opposites, that they are combined all the time. It's a reality. I found it a philosophy that worked.

Anyhow, for me personally, a long time ago I decided that capitalism comes first and then comes socialism, that capitalism

generates the forces that you need to build a different kind of society, and if you haven't had capitalism yet, you can't do it. I think essentially that's what's happened in all these Third World countries where they were able to try to construct socialism, not where socialism was strong, but where capitalism was weak. Now, of course, they've got strong enough to become capitalists, and that's what they're going to do.

I think the ball's in our court. I think the most interesting country in the world, to me, is America, even though they have almost snuffed out any alternative thought. I started saying yesterday, I derailed us, that I think America has imposed on itself some totalitarian features where people don't allow themselves any longer to think about the possibility of an alternative society.

There's no way within the foreseeable future that capitalism will completely disappear in America, but you do need alternative seriously competing institutions, and I don't mean a vegetarian restaurant where everybody walks carefully so as to not tread on worms. I mean things like an educational system and a medical care system and so on that are not businesses. You've got to have those structures. Capitalism needs those structures, but they also need to compete actively with a different motivation. They must not be fueled by greed; they must be fueled by a spirit of public service.

It's the intolerance of American society, intellectual intolerance, that I think is going to create very big difficulties for you. I think our great advantage in Britain, because we're closer to Europe, is a much more tolerant atmosphere which allows social experiment, and I hope that for

the rest of my lifetime, anyway, socialists are going to recognize the truth; that is, that capitalism is sill here for a very long time. We can't fight it out with guns all the time, because they're too dangerous but we can fight it from our liberated areas, of which at present the NHS is most important.

Mullan: That's a good place to stop.

[End of interview]