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PROFESSOR SHEILAGH OGILVIE FBA- MARKET, STATE AND CONTAGION FROM THE BLACK DEATH TO COVID

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LECTURE TRANSCRIPT

Good evening, everyone and welcome to Adam Smith's Panmure House. I'm Professor Adam Dixon, the Adam Smith chair here and it's my pleasure to welcome you for what will be an amazing Adam Smith lecture. So, for those of you that know the history of Edinburgh or if you've been here as a tourist, you may have gone to Mary King's Clothes where you took your family to see the history of what Edinburgh looked like in the in the 17th century where they had the cramped streets and the poverty and the dysentery, but also things like the plague, right, where people were mashed in and died and, you know, had pus marks. So, I don't want to kind of ruin everyone's dinner but suffice it to say that disease and germs were a big part of Edinburgh's history. And in fact, disease and infectious diseases have been an important part of the human experience throughout time. I mean, more recently, it seems many, many years ago, but we also experienced a big global pandemic. And what was fascinating about that blue?

Well, I shouldn't say it was too fascinating because many people died, but we got to see how different places around the world interacted with this pandemic, with this disease. And not simply how countries, whole countries or even cities, but also how communities, how different religious groups, even how different families coped and interacted with this changing environment. I'm sure many of you knew some neighbours that were really scared and wouldn't let your children play with your children, but that happened all over the world. Now the nice thing about Panmure House is that if we think about economics, we don't think about it in a very narrow sense. We think about economics like Adam Smith did in the broadest terms possible. One thing that we're interested in focusing on here at Panmure House and some of the research and work we do is on infectious disease because even though COVID was a big shock to the global system, it's still the case before CO and even after that infectious diseases is one of the biggest killers around the world. It affects mostly poor people, but it affects us all. And how different societies, how global society interacts with disease and infectious diseases is a really important challenge that we face like many of the other global challenges. And so, on that note, I thought, wouldn't it be nice to invite an economic historian, one that can explain to us how institutions operate from the state through to markets, religion, the family, how these institutions help human society cope with the challenges that we face. And fortunately, she had a new book out which has just been published, and I encourage you to purchase downstairs which is on pandemics and the history of pandemics. Our speaker tonight is Sheilagh Ogilvie who is the Chichele Professor of Economic History at the University of Oxford as well as she is a fellow of all souls. On that note, I don't go through her entire biography and all of the books that she's written because we do have an amazing lecture for us uh this evening and hopefully some vibrant discussion thereafter.

Sheila, welcome to Panmure House on the stage. Thank you.

[Applause]

So, it's a pleasure to be here. It's a pleasure to see so many of you here today, especially since we must all feel that we've had quite enough of pandemics over the last five years. Today, what I want to do is to tell you how I came to write controlling contagion and what I found out while writing it since it was my pandemic project. I didn't intend to write that book, but external circumstances made it essential or made it seem essential to me. I want you briefly to cast your minds back to all over the world, wherever you were five years ago. Empty streets, empty markets, echoing Bacio's haunting images of Florence in the Black Death. But deserted markets weren't the only historical echoes. Lessons from history for COVID were everywhere. politician speeches, news items, social media, each of them was prescribing a magic pill, as it

were, a key a key solution. The strong state, a muscular market, a cohesive community, a robust religion that would save us from this thing that had come in and messed up our economic and social life and all of our holiday plans for 2020.

Some of these magic pills were harmless myths, but some of them were not so harmless. And as it happened, it was one of those times when as an economic historian, you think, you know, this is something I know about. This is something where I actually directly have something to say about what is going on in our society today. Which is not to say that I don't normally have that feeling, but I had that very intensively five years ago. So for fun as it were, I started trying to bust some of these magic pill myths about how we should organize or should have organized or should in future organize society so as to make sure this sort of thing didn't happen again and also working out what happen what should go in its place and what emerged was controlling contagion. So, what I want to do today is I've told you about how I came to write it, what I now want to do is to give you a sort of executive summary, a whirlwind tour of the kind of things that it talks about. I think there's no there's no way in which I can tell you everything that happens in 555 pages, but I hope that I will give you a taster of what's in it so that it might interest you to find out a little bit more. So, I start out by asking the question, how can society what does an economic or a historian economist or a historian what does she have to say about contagion? Isn't contagion really a medical issue? Why in pure house where we're supposed to be thinking using economic tools think using sort of social science why are we talking about something which is basically a medical issue well even three or four or five or I will argue 700 years ago centuries ago people already understood that pandemics were a social and political and economic issue. do as well as a medical one. Long before scientific medicine, which really only began to emerge in the middle of the 19th century, people actually realized that human choices affected pandemic contagion. They affected pandemic contagion through social and physical distancing, through public information about whether the plague was coming to your city. And even in the mid-4th century, cities in northern central Italy who had not yet uh received the black death began to hear that it had been elsewhere and they actually already began to draw up policies to deal with it. So, information, public information, information, cross border notifications of pandemics were already a feature of 14th century Europe. sanitation. In fact, sanitary regulations go back more than 2,000 years. There are sanitary ordinances which I talk about in the book from India in the pre-medieval period. Uh masking. I will show you a picture later on of some 13th century Mongolian women wearing face masks who look very similar to the way that we all were all looking five years ago. immunization actually predated the invention of vaccination in 1796. There were forms of immunization against smallpox which had been being used in traditional societies that worked in traditional societies, and which are documented in China from the 1550s onwards which I talk about in the book. And the kind of social matrix out of which these forms of human action which can

actually control pandemics uh came is one of the key questions which I look at in the book. So, there are all sorts of things which I can do as an individual to prevent myself from catching a disease. But my individual choices also create something and I'm going to use a tiny little bit of economics jargon here. Externalities. It's basically a bit of jargon that refers to spillover costs or spillover benefits where something which I decide to do as an individual has spillover cost or spillover benefits that I don't pay for, or I don't get rewarded for. So, since we're talking about beneficial things like distancing and information public information about or health information sanitation and so on, we're talking about positive externalities spillover benefits where my decision to mask protects all of you. so, I but I will tend to do less of them than society would like me to do because I don't get directly rewarded for it. And the question, the key question which we faced five years ago, but which societies across Europe and the Middle East and Northern Africa faced 700 years ago was how society can make me do more of those things which have these spillover benefits. So how do you deal with the question of positive externalities or negative externalities? I'm just going to call them spillovers from now on. Well, already in6004 and this is actually the heading of this slide is a quotation from the604 English plague law which legally obliged parishes to compensate poor people for complying with stayat-home measures.

Now, this may be very reminiscent for everyone who lived through this 5 years ago. And I'll quote from that 6004 plague law. Since they the poor of necessity might be by some charitable course provided for lest they should wander abroad and thereby infect others. So, a very clear understanding of the concept of the negative externality. To survive, a poor person may need to go out to work. And indeed, we saw during COVID that people who were in often less wellpaid occupations had to go out to work and both risk their own lives but also were conveying contagion to their families or their communities. So, this was actually something which social institutions were trying to deal with in in6004. And as I argue in the book, this just happened to be such a beautiful quotation, but they were they were trying to deal with it centuries before that. So the question is, how do we coordinate in ways that make me take account of the benefits I create by doing something which protects everybody in this room or all of my students in Oxford or everybody in my neighbourhood or in my society? and how do we perhaps charge me or punish me for doing things which cause harm to other people? What helps us to work together if you like as a population as a society when we are faced with a really huge natural threat if you like. Well, human populations have something have a superpower if you like. social scientists call them institutions. By that we don't refer to like the Bank of England or the University of Oxford or the Royal Family. We're thinking of institutions in the sense of systems of rules and practices that help us to act together as a society to coordinate our activities so we can achieve more than we can just as a collection of individuals. Traditionally uh social scientists, economists emphasize institutions like the market, core

institutions like the market, the state, the local community, religion. I I've put the word guild there, but think sort of professional association, the British Medical Association, sort of professional corporate groups if you like. The family is another core institution. All of these institutions, as I argue in the book and as I'll explain in a moment, help us to reduce our costs of coordinating as a group or as a society to encourage good spillovers, to encourage me to do things which are actually good for everyone else, not just for me, maybe not at all for me. to discourage bad spillovers and to respond collectively to respond jointly to natural threats. Now the one I want to talk about today of course is a microbial threat, but we also face other natural threats. We face climatic threats. We often face geophysical disasters of various sorts. Things our planet does things that come in from the outside which are exogenous to us. But we can actually do something about it. So, there was a w kind of a wider subtext to writing this pandemic book was to think okay you know the outside world the physical world the natural world is always bringing in new challenges to human societies. One of the reasons why we've for good or ill expanded to cover the entire planet is partly not just because we're cognitive we have a lot of cognition. We're very intelligent, but we've we actually coordinate. We're actually good at enhancing each other's intelligence by learning, by coordinating, by teaching the next generation not to make hopefully the mistakes we did. So, the way in which institutions help us to do that was one of the fundamental things which I wanted to talk about in that book both as an economist and as a historian. So, the book talked about how sometimes things went reasonably well and went there was a general upward trajectory over time. And I want to talk about why and when they went well. In a second, I'm going to be talking about the ways that they didn't go well because I think as economists and historians, we have to be aware of that as well. And I think the question as I mentioned at the beginning, one of the motivations for me in writing this book was that I felt that there was a little bit of a tendency at the beginning of COVID and maybe even well into COVID to think, okay, we just have to find a magic pill, a key institution. It's my usually it's the favourite institution of the policy maker or the social media star. the thing that she or he already believed before the pandemic. That's the key to solving the pandemic. And it was the case that in pandemics each institution did help to solve both the black death and subsequent smallpox epidemics and cholera epidemics and typhus, and the 1918 to 19 influenza and you know and what we went through five years ago. So the market was really an important institution particularly the e it both it provided the economic growth and we'll talk about this in a second but it provided economic growth I mean market led societies as we'll see in a moment were the ones that provided both higher incomes for individuals but also greater fiscal capacity for states and greater philanthropic resources for civil society institutions to fund health measures. So, both private health measures and collective health measures.

The state was also an important institution, and you do see it from the black death onward. whether it was a local state, the sort of city states of central and northern Italy were the sort of poster children of this but it moved to central and northern Europe over time. the Islamic states in the in during the black death also took collective action to deal with the plague epidemic. uh coercion to limit people's bad externalities to stop people from giving one another plague. community played a big role, peer pressure, people observing one another's compliance with the with the plague measures or compliance with hygiene measures. peer pressure to discourage us for from engaging in harmful choices.

And those of us who lived in small communities during COVID would certainly have been aware of the eyes of our neighbours upon us during this period. Religion played a role. There's some really lovely examples in the book of religious authorities saying, you know, it is a truth universally acknowledged that we should not infect our neighbour. God does not want you to do this. So, you know, moral exhortation to care for our fellows., guilds, medical guilds, medical associations provided expertise both to individual patients and also increasingly to their communities, to their governments about how you might empirically be able to limit the uh the spread of pandemics.

And finally, it's often forgotten, but the family is a core institution that and it differs across different societies. So, you know, in some societies it's a nuclear mostly a nuclear family, small households. Uh, in other society it might be an extended kinship group, or you know, an extremely large, interconnected clan. All of these types of family. There's a whole chapter in the book about the family as in in an institution which often provided the emotional bonds which provided individual family members with the motivation the emotional motivation to comply with societal pandemic measures in order to protect their own family members. So, thinking of the family as actually a core institution, I mean if you think about it, your family probably knows more about you than anyone else and uh the family is a very core institution in dealing with the problem of contagion. So, each of these institutions did help with pandemics and I talk about these positive sides of each of these core institutions in the book. But each of them also displayed spectacular failures. And it's kind of sad but true, but the spectacular failures side of the book is probably a little bit bigger than the, you know, than the good news. But on the other hand, they're wonderful stories if you did not have to live through them. because things sometimes went really badly. And I you know I have so many pictures that I would have liked to include both in today's lecture and also in the book., this one is a picture of the Moscow plague riot of September 1771 when the uh government had kind of been a little bit too authoritarian and had not interacted or informed the citizens and they imposed very brutal quarantines and locked a lot of people up in isolation hospitals and closed the markets so that people could not get bread. And the plague riot raged for three entire days from the 15th to the 17th of September 1771. They raised a monastery to the ground. They destroyed an

entire quarantine zone in Moscow. And in the end, the plague riot, well, you can see, you know, furniture being thrown out of windows and burnt and so on., it was only uh the riot was only quelled by sending in the army. So sometimes things went really badly. This is an example of bad state capacity. State capacity that was actually in fact on paper exercised for a good purpose but in a super authoritarian way which gave rise to extremely damaging resistance and of course the plague raged even worse after the Moscow plague riot. So, I was very happy to find that picture even though you would not have wanted to live through that. Every institution has a dark side. Every institution that I was just talking about where I was talking about, you know, how wonderful it could be, it had features that could exacerbate pandemics. So, the market motivated us to trade, to migrate and infect one another. And people at the time kept talking about, you know, the greed to get rich goods into your warehouses and the, you know, those goods would actually have, you know, would be touched by plague and people who bought them would spread the pandemic. The state, as we know, waged war. It often falsified public health information for political purposes. It coerced us, as we'll see in a moment, for political ends, not just for our own good, but for it its own good. The community, you know, I was talking about that beneficial peer pressure, but local communities, you know, problem with community is that it's local. So, it doesn't care what happens beyond the boundaries, beyond the town walls., and there are many examples of local communities which didn't care what happened in the outside world. They organized resistance to health measures. They threw out infected migrants and minorities. They threw them out even though by throwing them out they were throwing out a pool of infection that spread itself across the society at large. But of course, the local community doesn't care because it only cares about what goes on inside the community. religion in our own time but also you know during the black death organized super spreader events often organized super spreader events precisely to ask God to make the plague go away. So, there were you know uh public processions in Damascus and in many Italian cities to you know basically beseech the deity whichever deity it was to take the plague away, they preached against science then as now. Not always but sometimes. medical guilds. We saw how they advised both patients and communities and governments, but they also limited medical supplies. They increased prices. They blocked innovations. They vetoed some very key innovations. and the family we all know of the concept of amoral familism which is the idea that people only care about what happens to their own family at the expense of the rest of society. So, there's a problem with each of these institutions. If you only care what happens to your own family, you'll be maximizing for them even if it involves infecting the rest of the community. So, what comes out of looking at each institution is that each institution has inherent weaknesses. You don't expect the market to be able to do everything. You don't expect the state to be best at everything. and each is sometimes captured by malign interests. So recognizing there isn't actually you can't put your

finger down and say yes we need a strong state or yes we need you know a mighty market there's actually something a weakness or indeed a tendency toward if you'd like contagion exacerbation in every core institution and it was actually that realizing that I that my suspicion of the idea of a key institution was actually richly borne out by the last 700 years of pandemics. That led me to ask, well, okay, what do we do? Do we just kind of throw up our hands and say, well, you know, there's nothing we can do about it. Nature is going to win. Well, I didn't decide that I couldn't make a decision. seven centuries, six continents, get the books about every all continents where I could get data, not just about Europe or even Europe in the Middle East. 556 pages, 20 tables and 19 graphs later, the conclusion that seemed to emerge from multiple societies and historical periods worldwide across eight major pandemics and innumerable smaller ones from the black death to COVID was that there was indeed no key institution, but that the characteristic of those societies or those parts of societies that managed to do better controlling for the characteristics of a particular pandemic and the technology available to deal with it at the time were ones which were characterized by an interdependent framework of institutions which interacted with one another in intricate ways but not unanalysable ways. So, they were complicated but we can analyse them systematically. And the characteristic of these interdependent institutional frameworks that were not a sort of magic pill but just gave rise to somewhat better pandemic outcomes were had they had this tripartite structure on average. First of all, a well-functioning market and I'll talk about the particular characteristics of that in a second and why it mattered. Secondly, what I call a temperate state, and I will define that temperateness also in a moment. And finally, a vigorous civil society which had multiple components in it. So not uh if you like both the structure needed to have all those three components and civil society itself shouldn't be dominated by one particular component of civil society. It seemed so let's start with the well-functioning market because you know we saw at the beginning there's this problem that markets is its well-known market failure. They don't deal with externalities terribly well. So why are markets good when you've got a natural threat like a pandemic?

Well, I actually tried to choose a nice market naturally an early modern Dutch market since the Netherlands the were the you know the most market legendarily the most market oriented and indeed the richest economy in the world Europe and hence the world in the 16th century. uh view of a marketplace. It probably a some port town in the low countries in the 1570s. markets did two things. So, market societies on average had higher incomes and faster economic growth than societies in which markets were less active. And I only included one graph although there are many more of them in the book. This shows just a few selected countries, the per capita GDP along the vertical axis and the year along the horizontal axis just to give you a sense of the fact that you know you sort of think premodern economies they're all poor. Well, they were all poor compared to our economies now, but some of them were poorer than

others. And it's very interesting. These are, you know, these are based on the best estimates we have from macroeconomic historians who have patiently and arduously reconstructed the national income accounts of different countries in the world going back as you can see well Japan is the one where we can actually go back to the year 900 but you can see that they were actually diverging already in the medieval period and you know Renaissance Italy wasn't just producing great art. It was also producing high per capita incomes up to you know 1500 there and then you see the Netherlands becoming you know in its golden age becoming the richest country in Europe and then you see the massive green take off of England. So, each of these the institutional and qualitative analyses as well as sort of internal studies suggest strongly that these societies were rich partly because of their vigorous markets. Not just because of them but partly because of their vigorous markets. So, market societies on average tended to have higher incomes and faster economic growth. Those higher market incomes, of course, they weren't all used to deal with pandemics, but on average from the Black Death onwards, they improved individual survival. So, there's a gigantic like 1,200-page book by Ola Benedictto, which looks at the Black Death in all of its different facets. and he brings together community level statistical analyses showing how uh richer peasants in medieval England in mid-14th century England had better survival rates than the poorer ones from plague even though we didn't understand until 1897 what actually medically scientifically caused plague but being rich being even mildly rich a better off peasant was better for your survival in your family survival from the mid14th century onwards. So higher market incomes improved individual and family survival. They also increased fiscal capacity. If a society is growing or has higher per capita GDP, the state can actually take more of it without causing you know social breakdown if you like or starvation. And indeed, it's sometimes argued that that very fiscal capacity can feed into collective action, which makes that economic growth more likely. So, it's a two-way relationship., and finally, higher market incomes. Remember, there are these other institutions, there are communities, their religions, their guilds. They too had to get their resources from somewhere so that they could do the things they did. and that this vigorous civil society was also supported by the fact that people had more disposable income to provide to these other civil society institutions. So higher market incomes were pretty good for different aspects of pandemic survival. and the final line here, you might look at this and think she's saying that markets spurred and funded medical innovations. I would have thought that you know technical innovation is an example of you know a situation which markets aren't that great interest I found it very interesting to see how markets didn't really spur people to invent new medical approaches but they sure helped with implementing it within society at large and remember that I mentioned the that form of immunization before vaccination. So, from the 1550s onwards in China there was this thing called variolation which involved injecting people inoculating people with live smallpox a sort of attenuated but actual smallpox lymph. 1.6% of

people died but if you survived it, you were immune to smallpox for the rest of your life. And given that there was a 10 to 20% chance of dying of natural smallpox, the trade-off was, you know, take the risk now and then your children or you would, you know, survive the natural smallpox. The interesting thing is that there were multiple institutions that propagated this. But the reason we know about it in 1550s China was that there were dynasties of commercial variators already operating there. And the cool thing is that and this was actually something I learned while writing the book that one of the reasons why England became a sort of centre for immunization in the 18th century was that there were franchises of variations. So there was a particular family, John Sutton and his many sons and they had a franchise and they worked out, you know, lower mortality ways of variation and it was and they charged money and all the teenagers in a particular village would collectively go off to the nearest town, get varulated, come back into their village, all got get hopefully mild smallpox together and they would do it precisely so that they could go off to London and get jobs. So, it was like a village level thing, but it was it was something which the market actually diffused in England. Another example which I will give you from our own day the Fiser vaccine against COVID in 2021 involved 280 components from 86 suppliers in 19 countries. So the market was actually helping to put together the thing which if you like broke co so you know it's markets are not that great with all aspects of innovation but they're pretty good at taking an innovation and running with it or you know supplying all the components of it and that's a good thing to remember is that you know there's no guarantee that the resources generated by market led growth will be used to control contagion since that depends on who controls their allocation. But if the resources aren't there, the markets aren't there, they certainly won't be available to deal with epidemics. It's worth remembering, poverty kills.

So that's the good side of the market. Market externalities and you know markets also motivated people to work and trade while infected, imposing costs on others that the markets didn't charge them for. And I thought since Adam Smith had actually said stuff about this, I would bring in a few quotations from the wealth of nations. So, I was rather charmed to find that he was talking about externalities. Those exertions of the natural liberty of a few individuals which might endanger the security of the whole society are and ought to be restrained by the laws of all governments. So, a very nice laying out of the problem that you know my individual action might inadvertently cause harm to everyone else and maybe it would be good for someone to stop me from doing that, the other thing is of course that we know that markets tend to underprovide information because it's really difficult to charge someone. You know once you've thought up an idea how do I exclude you from knowing it? Well, I'm not I'm actually conveying it. But the other thing is, you know, it's good for society that a good idea should be spread widely, but if you spread an idea widely, you can't profit from it. So, markets tend to underprovide information, they underprovide quarantines, they

underprovide sanitation, they underprovide research. And it was also a nice thing to discover in the wealth of nations, Adam Smith writing about how those public institutions and those public works which though they may be in the highest degree advantageous to a great society are of such a nature that the prophet could never repay the expense to any individual. So, a really beautiful exposition of the concept of the public good. I may not profit from having thought up this book, but you know fortunately someone pays my salary at the University of Oxford to think up to write books. So, the market the good side and the things that it isn't actually perfect at and that's where other institutions come in. I mentioned a few minutes ago the temperate state. I tried to choose a very temperate picture here. It's a picture of the Laterto at Leoro in 1780. which was the place where you know ships coming in from the eastern Mediterranean or indeed from anywhere had to kind of dock there and the merchants had to go into the letterto with their wares and wait there for a bit to make sure that they didn't have plague and then they were allowed to continue a very but it's it seemed like such a tranquil picture of you know the state being nice and good a protector so controlling externalities through physical or social distancing, mandating face masks, I promised you a Mongolian face mask and we'll see it in a couple of slides. or perhaps, you know, mandating as increasingly after 1796 some governments in Europe did that people should get vaccinated because it was beneficial to the rest of society. although actually most of them started with the army. So it wasn't that the state was concerned about society at large. They just didn't want soldiers to die. so, controlling externalities is one thing which a temperate state will do. providing public goods, health information, medical research, sanitary hygiene measures and something we haven't talked about, but I do talk about in the book is cross border externalities because what we do in our country doesn't just affect us, it also has spillover costs or benefits for other countries. Quarantines is an obvious thing. those ships coming in from other parts of the Mediterranean and doc you know they've brought in whatever their plagues are from another place. So, quarantines first quarantine in Europe Ragusa in 13 now Dubrovnik 1377 vaccine diplomacy we might think that it was like something we invented during COVID wasn't as soon as vac smallpox vaccination was invented in the late 18th century several European powers started to send vaccine expeditions all over the world. In fact, it was like a it was like a remorse project by the Spanish monarchy. Several members of the Spanish royal family died of smallpox.

And so, but also this the enlightened Spanish royal of the time felt very guilty about what had happened in Spanish America with this the sort of Spanish conquest which killed millions of indigenous people and sent a ship of vaccinators on around the world expedition to vaccinate people starting with Latin America. So, the first vaccine diplomacy was actually happening to deal with crossover externalities in 1806. and river agreements were another example. The Danube is a river that flows through like you know at least 12 if not more societies carrying

cholera as it went in the 19th century. And there was a Danube commission where the different countries through which the Danube flowed got together and made agreements about what to do about not dumping stuff in the Danube. I wouldn't say it was always completely successful, but it did have mild successes, let us say. and indeed, they built a water purification plant at a key place at the very end of the Danube which prevented cholera from kind of going back upriver with the ships. So, river agreements I think maybe the Ganges would be another example because during COVID uh their infection was also spread u through the Ganges. The problem with Ganges is that it goes through a lot of different local governments and the problem is dealing with the crossover externalities between each of these lo local governments because Ganges really does still convey uh contagious disease. So, things that the state can do however the state was a problem. I this is actually a picture of a Mongolian attack on a fortress. It was the reason I put it there was that it was it was like a Mongolian siege of Kafa on the Black Sea which is supposed to have brought the Black Death to Europe. So, you know jumped the walls into Kafa and then all of the Italian merchants fled back to Italy burying the Black Death with them. So, this is the best picture I could find of a of a Mongolian attack on a on a medieval fortress. So, you can see where I'm going on this. The dark side of government. In the past, before the 20th century, between 70 and 90% of the taxes of every major state we know anything about, including Britain, were spent on war. War is a major driver of pandemics. One of the highest COVID mortality rates in the world were in Syria during the civil war there in 2020 and 2021. So, war is really bad for dealing in fact war transmits pandemics legendarily not just in the black death, but you know to the present day. In addition, there are horror stories which I talk about in the book about how the various governments falsified health information to serve political ends., there were a lot of like rather horrible governments, but there was also the British government in 1918 to 1919 which minimized the influenza pandemic because of wartime. It was, you know, let's not let's not make people realize anything's going on here because we need, you know, we need action in the war effort. So, it's not just, you know, bad governments, nonparliamentary governments. You know, governments have their own political ends to pursue, and they're not always oriented to providing accurate information about a pandemic., or pandemic policy as a pretext for authoritarianism. And I put human rights watch there because I remember during COVID reading the human rights watch world report for 2022 in which no fewer than 16 out of 101 world governments that were listed were using COVID 19 rules two years in as a pretext for restrictions on assembly, bans on peaceful demonstration, arbitrary Imprisonment, censorship, journal, journalists persecution, separation of children from parents, internment in isolation hospitals, overriding parliament, travel restrictions, AI facial recognition, sexual abuse, capital punishment. There are all sorts of things governments want to do to their citizens sometimes. And over 700 years governments have used public health as an excuse to be authoritarian. So, something to remember. So, what's the

temperate state? Well, in the book I talk about three characteristics of the temperate state. First, it does need a threshold level of fiscal capacity, but it doesn't need super high fiscal capacity. So, a certain level of extracting resources from the economy for public measures of various sorts appears to be associated with successful pandemic control. Secondly, subsidiarity which is the principle that the government should take action at the most immediate level consistent with the resolution of a particular problem. Sometimes in pandemics that's the local level. Local government was pioneering in many of the earliest pandemic control measures down the ages. But the problem with local government is that it is local. Sometimes you need the central state to bang local heads together and sometimes you need super national organizations to bang national government's heads together. So, the concept of subsidiarity even though it sounds a bit you know like it sounds anachronistic but actually analytically it was really important for controlling pandemics you know across the centuries and finally constraints on the executive. Now we know about those constraints because of the emphasis on parliaments. But there were parliamentary governments that were not particularly good at controlling contagion. And indeed, the parliamentary elites themselves blocked contagion measures. So, it's all of civil society, not just parliament. vigorous civil society, non-state, non-market institutions played a big role. And this is that third part of the tripartite structure. Communities, religions, families, associations of all sorts, professions did in a number of cases very important, devastating epidemics. You can see the civil society organizations in there supporting the measures that they didn't give rise to perfect outcomes, but they gave rise to better outcomes than in places where the civil society was not in place. They supported the market and the state in the good things they did but they also curbed the market and the state when they did the bad things that they did. So that that's really the role that comes out of the civil society institutions in the book is both supporting and curbing the activities of the core institutions of the market in the state. So, I want to end by considering the question whether something called societal learning is possible. Is it possible for societies to learn? It's called the triumph of death because I thought you know 16th century Netherlands you know supposed to be this dream society but you know he had a vision that there were situations in which even in the richest country in the world death could triumph and I also chose a quotation from a US physician in December 1918 where he described the influenza pandemic as a destroyer and teacher. Is it possible for us to learn as societies not just as individuals? Well, in the book I say a sort of moderate moderated a temperate if you like positive answer to that epidemics have declined hugely since the black death. The market plus the state plus civil society did help human societies learn in three ways. Scientific learning, understanding the relationship between humans and microbes. Social learning, devising rules that work with rather than against individual motivations. I think that's a policy design issue is figure out how people are going to respond to policies.

Don't put policies in place that are people are just going to try to get around or just going to have like the Moscow plague riot. And finally, political learning because persuading diverse interests to work together in society, it's undervalued, but actually those societies that did it down the ages and that do it now are the ones that manage to control pandemics. So, it was gradual, it was uneven, and it is still incomplete. So, I don't want to be telling you like this happy story we saw during COVID that this societal learning was very incomplete. I hope we did learn I hope that CO was a teacher as well as a destroyer, but you know the trajectory was definitely upwards since the black death. So, what can we say? I think seven centuries of history do give us some lessons. The bad news is that the lessons are not simple ones. I haven't given you a magic pill. I haven't told you there's one key institution. The good news is that the lessons are not extreme and that we can analyse them.

Some of them, I think, I would argue have already been learned. We're going to have to work on the rest. And what we have to do is continue to tackle both the scientific challenges and the social and political challenges of interacting with nature. And I will leave you with some words of wisdom from our spiritual host here in this room., Adam Smith wrote in the Wealth of Nations, "It would still deserve the most serious attention of government to prevent a leprosy or any other loathsome and offensive disease, though neither mortal nor dangerous, from spreading itself among the great body of the people, though perhaps no other public good might result from such attention besides the prevention of so great a public equal." Thank you very much.

I always love it when people bring Adam Smith into uh the lectures. but the lecture didn't need Smith. But I think what you demonstrated is that Smith wasn't just looking at this but just your general uh talk is that Smith was the first institutional economist that when we think of you know Smith has always been abused and put out as this sort of let it rip free market capitalist but in fact actually Smith like Sheila's great talk demonstrates the importance of having those balances between civil society, the market, which can be very powerful, but also the tempering aspects of the state. But likewise, as we see in Smith's work and as the work we do here at Panmure House, understanding that time and space uh creates all these differences in how we experience the economy, how we experience society. Now, I'm not going to ask a question because I know for certain there are people that have questions. I'm looking at a few in the back of the room that have probably questions on your great talk. So, I want to throw it open to the floor. First and foremost, we'll go with a question here.

Hi, Sheila.... Justine.

Hi, nice to meet you. this is wonderful and I was wondering but it made me wonder about another factor which is communication and communicative technologies, and I wonder over the course of that 700 years in which communicative technologies changed a lot first with print then with mass communication now with the internet. How does that interface with these other factors that you've identified?

Communication technologies did matter a lot. The initially it was you know obviously messengers moving from place to or you know ships fleeing the Black Sea and coming to the Western Mediterranean saying there's something bad happening in the Eastern Mediterranean. gradually communication greatly increased. by the early 16th century, my Italian colleagues tell me that plague had actually endemic plague had pretty well disappeared from central and northern Italy even at a time that it was still raging in northern and central Europe. And one of the reasons for that was not just that the state was you know sort of quarantining people very effectively, when plague came to central and northern Italy by the 16th century it was always coming in from the outside. It wasn't passing internally.

And one of the reasons was that the different Italian cities even though in some ways they hated one another they were also they kind of had an agreement that they would pass information to one another. So, when the plague was coming to your city, there was a communication among the among the civil servants, they would send off letters to the other central and north Italian cities saying plague has come or we think plague has come or we think plague has come to this other city. And so there you know there was already a sort of you know a if you like a postal system conveying that information. Merchants also conveyed information in their letters. So, we know from you know medieval merchant letter collections that merchants had groups of correspondents all over Europe and they conveyed prices they conveyed supplies information about supplies, and they conveyed information about whether plague had come to a particular centre. So, there were you know even before the printing press there were you know there were there were sort of both state and market you know mechanisms for conveying information. The interesting thing is to see how very quickly the printing press was mobilized to the bills of mortality in London. You could actually go in and buy them from a municipal office. I can see nod happening in the in the in the front row here. So initially so they the government the British government initially said well you know maybe this maybe we should censor this information because it would cause a panic and fortunately, they decided that it was people would panic less if they were well informed. So, people you know private people would go and buy the bills of mortality for the recent week so that they could predict you know whether they should bring wares to market whether they should do business in a particular place. Printing press was really important for that. So again, this was a

combination of government local government market and actually private people including women who would go around and kind of collect information from the neighbourhoods about who had been dying of plague. So, there was a lot of sort of different institutions cooperating with one another to produce public information., and you might buy it in the market, but you might also get it from a government office. But you're absolutely right. I mean, information, public information about what's going on with an epidemic is really important. We might think this is something that we only experienced ourselves over the last five years. People were already doing it in the late medieval period. The problem with historians is we think we have are so new. Yes. And then they come in and tell us that no sorry this has happened for the last 700 years and this is why but not everywhere trying to figure out where and when it happened right so we'll go to Susan and then behind after that I'm wondering if there's any lessons from history regarding bad actors and I'm thinking in the context of vaccination rates beginning to fall as people tell them they're not actually good for them and if there's any lessons we can learn from the lost on that. There are some kind of very bad lessons or very sad lessons from the very beginning as soon as well even before vaccination was invented. So, this variation inoculation that existed before there were people who argued against it. There were religious figures in particular that argued that you know God wanted you to get smallpox. Uh there fortunately there were also religious figures who said God wants you to get vaccinated too. So, you know there was a there was a sort of fatalistic approach which is you know if God's finger comes down and gives you smallpox it's you know it's your own fault. But there was also you know he wouldn't have allowed vaccination or variolation to be invented if he hadn't meant us to use it. Uh interestingly there's some really nice study of two adjacent parts of southern Germany in one of which in the early 19th century they both had vaccination laws passed in almost the same year 1816 and 1818 Bern and Württemberg so they're side by side they had different institutions and they had really different vaccination rates so I think there were always voices both religious voices and sort of traditional community voices, you know, people who were kind of suspicious of anything new. But the institutional framework work which empowered religions and communities and markets and the state to put these beliefs these res the resistance to inoculation or vaccination into practice differed across societies. So there are quite a few stories of bad actors particularly if you like rabble rousing you know community headmen or religious figures arguing against immunization but correspondingly there were also community leaders there were you know in England had a sort of communal variolation vaccination system whereby they actually rewarded people who were on the on poor relief gave them a certificate and a bit of money if they got themselves inoculated. So, you know, it depended on whether the rabble rousers were actually able to sway the local society to resist. But yeah, I mean it was kind of sad to realize in fact when I told German colleagues that I had discovered this contrast between Bern and Württemberg they said yeah Württemberg still the

epicentre of antivax sentiment now and I thought you know historical past dependency the other great thing about historians is that uh when you think the world is becoming worse and worse and worse actually we have cases where yeah it was bad but then there's all these great things that can happen. So anyways, the question there.

Yeah. Uh Robert Frost.

Hi Sheila.

Hi.

That was terrific. you've kind of headed me off at the pass with your answer to the last question because I was going to ask about religion and religious institutions and I wonder if you could talk a bit about how they interacted with the institutions you did talk about the markets, the state and the role that they play. I mean, I presume that you would say there are good externalities and bad externalities of religious institutions, but were there certain kinds of religious institutions that operated in ways that mesh with the themes you've told us so much about?

There were spectacularly bad things which different religions and I wouldn't want to say any religion was worse than any other. there is a sort of traditional view that somehow you know Islam had a sort of fatalistic attitude to pandemics whereas Christianity had a more you know you know dynamic view. Actually, now that we know more about both, we realize that both religions and indeed, you know, Catholic and Protestant religions had both fatalistic and dynamic sides, you know, to that that the one in the same religion. So, it's not that the theological content was determinative. I think two things emerge, there's a gigantic chapter in the book which is specifically about religion. two things emerge. One is that it tended to be the extremes, the extreme either the sort of extreme outsiders, the sort of the that you know the sort of peyotists in Württemberg, the extreme sectarians and the extreme authoritarians, super authoritarians like Jansenists in the French, you know, established church, they tended to be the ones that were arguing against whatever it was, whether it was getting vaccinated or contagionism, you know, the belief in microbes and so on. It was the, you know, it was the middle of the road, you know, established church, which, you know, is often described in rather denigrating terms, was actually the one that tended to, uh, argue that, you know, you should pay attention to not infecting your neighbours. And, you know, the one thing I think most churches did was to say you had to come to church. So, even the ones who Yeah. even the ones who said you shouldn't infect your neighbours, but you should still attend church. but it was interesting to see how it was the extreme left and the extreme right if you like within religion that were against whatever public health measures it was and it was the you know the middle of the road once that were saying actually why don't we all behave sensibly God wants us to do that the other thing is a more if you like analytical answer which is increasingly e the econ economists who work on religion you might not realize that e economists are so imperialistic There's an economics of religion as well and they increasingly think of religion as what they call platform which means that it interlinks spiritual with secular services that it provides to people and some religions interline access to the sort of welfare aspect of religion with signing up to extreme beliefs you know against vaccination or against whatever it was. And actually that was something which American colleagues described from the United States during COVID was in order to get access to the very real support which religions provided to people in the pandemic they basic people had to commit themselves to also taking on board you know antivax views and you know I think you can see that far back in history is that religion is always a platform sometimes times the religion wants you to commit yourself to an extreme belief to show that you're a true member of the religion but sometimes that can have really bad effects on you know your decision to take public health measures. So that platform characteristic of religion is something which I talk about in the book.

So, Maria and then Owen...

Thank you and thank you for the lecture. So, I wanted to ask you what do you think we are still getting wrong about the long shadow of COVID in our institutions today and how with all the work you've done in history how can we prepare for the next one?

That's a very good question I think I think the lesson that I learned in writing the book was that each institution is really good at some things but we should not place weight on it to do everything and I suppose that's where my argument that you need a very heterogeneous a very variegated institutional framework because you can't expect a single set of you know social relations which are optimized to I mean in the case of the market. You know, they're optimized to have a low transaction cost way for us, you know, a decentralized way for prices to convey information to us and, you know, direct supplies in a particular direction. Can't expect that to do the things which the state does or the things which religion does or the things which the community does. So, I think one thing that we could recognize is that next time and I hope there won't be a next time very soon. every 125 years you say well on average on average we're okay for the next 125 years it's a bit like a roulette wheel on average it shouldn't happen again and its but you know they're kind of independent random things also emerging diseases are many of them are zoonosis so they're like coming from animals to us and often

they're coming to animals from animals to us because of some ecological disruption in animal ecosystems. In fact, that's why they think plague happened was that there was a disruption in the Marmot ecosystem in Mongolia that sent the plague down with the Mongolian army to you know to besiege Kafa and that's where the black death came. So, you know, ecology, climate change can actually interact with that, but you know, so it might be happening a bit more now because of the way that ecosystems are. Yes, I know. Let's hope that that doesn't happen. But one of the things that we might that I think we could learn from COVID is instead of everyone going in with their favourite institution. So, you know uh whether uh you know whether it's that you know you really you know you're very keen on markets you want markets to solve everything. No, they're not going to do that, but they will generate the resources that will enable us to fund other institutions to do the things that they're good at. and I mean the other thing is that we're very used now to the state and the market being our central core institutions. One thing that I really ended up learning at the end of you know the five-year journey of both to get through COVID and to write the book was that the civil society institutions were really important. They played they played a each of them played a minor role but having a variegated system of civil society institutions was super important. So, you know, we're used to living in a sort of market dominant, state dominant society. We shouldn't put too much weight on any given civil society institution, but they do help markets and states work better. They also control their abuses. So, you know, maybe if we can bear that in mind next time, it we will actually be able to, you know, co will have not just been a destroyer but also a teacher. Thank you.

Owen, you had your hand up.

Owen, so my question kind of relates to your answer to the last one., so with globalization, we've seen a big increase in the number of new pathogens that we never had before. And I was just wondering well that's a side effect of markets as you would say from your talk but one of the ones I was thinking that we've kind of forgotten about which was a pandemic were HIV AIDS but that was a global one but a lot of the examples you've given were regional so black death is Europe and Asia but now because of globalization they've spread around the globe so are we in a worse situation today and the second thing I just wanted to ask I always asked this. So social institutions, what's the difference between that and social capital?

Because in COVID, a lot of studies said social capital increase vaccination rates, but are they the same thing or are they different or what's the distinction? So, you're right to mention globalization. One of the things I talk about in the book is how it wasn't just markets and international trade that globalized disease. It was also other institutions. So, war is a big thing

that moves large numbers of people in unsanitary conditions to you know naive populations that have never met you know that particular pathogen before. religious pilgrimages and crusades were another huge were and are another huge thing that moved pathogens. So you know it globalization is and was definitely a mover but we should regard there as being multiple institutions that do that and in fact cholera would be a really good example because it was endemic in Bengal for like centuries but it only came to the rest of the world in the 19th century and it very much came it came because of mass travel mass so religious tourism them, you know, people coming out of India and going on the Hajj on the pilgrimage to Mecca and you know, people there catching cholera and then taking it back to all their societies around the world. So, you can actually track the seven waves of cholera throughout the 19th century following the rhythms of infection, you know, in Mecca and Medina. So I think we should not I mean you're quite right globalization is even more of an issue now but it actually already in the 19th century was doing exactly that social capital that's a very good question I talk about it in the book in the chapters on communities and on guilds because I think social capital is very much associated it's a particular type it's generated by closely-knit networks of various sorts where people all know who's a member of the network whether it's of the local community or an occupational association where people within the network have multiplex relationships with one another. So, I think social capital is very much associated with what we as institutional economists would call communities and uh guilds and maybe religions and but it's only one part of those institutions. So, I think I agree that during co people kept on saying oh we need more social capital you know that will make people get vaccinated. depends on how that social capital gets deployed because you know closely-knit networks could also convey norms that you shouldn't get vaccinated and in fact, we did see that that these you know the sort of social capital can be deployed for bad as well as good purposes. It sort of depends on you know how the information and sanctions are con, and norms are conveyed inside the network.

So that was actually one of the reasons why I ended up writing about those networks in the book was that you could see them working in good ways and in bad during the pandemic.

Sadly, I have to bring uh the Q&A to a close, but fortunately we have uh a drinks reception downstairs where you can buy Sheila's amazing book. She'll sign it for you., I think you gave an amazing lecture that really fits with the spirit of not simply Panmure House, but Adam Smith and what we're trying to do here in the 21st century and better understanding the world we live in and how we address those challenges. So, please can we give uh, Sheila Ogilvie another round of applause.

Thank you.