

PROF. JOEL MOKYR. DOCTOR HONORIS CAUSA DE LA UNIVERSIDAD DE LA REPÚBLICA, URUGUAY

PRESENTACIÓN

El 6 de diciembre de 2018, la Universidad de la República, Uruguay, entregó el título de Doctor Honoris Causa al docente de Historia Económica Joel Mokyr.

Joel Mokyr nació en Leiden, Países Bajos, en 1946. Después de estudiar en Jerusalem y Yale, inició en 1974 su carrera docente en la Universidad Northwestern. Allí accedió, en 1980, al cargo de Profesor y, desde 1984, ocupó la posición de Robert H. Strotz Professor of Arts and Sciences y Professor of Economics and History. Ha sido Profesor Visitante en las universidades de Stanford, Chicago, Harvard, Dublin (University College), Jerusalem (Hebrew University), Tel Aviv y Manchester. Desde 2001 ha sido el Sackler Professorial Fellow de la Universidad de Tel Aviv y Fellow del Advanced Center for Behavioural Sciences, Universidad de Stanford.

Joel Mokyr ocupó y ocupa puestos destacados en muy diversas organizaciones profesionales y ha sido editor o miembro de consejos editoriales de las más destacadas revistas de historia económica. Entre muchos trabajos editados, puede mencionarse la Oxford Encyclopedia of Economic History. Entre las distinciones obtenidas, se encuentra el Heineken Prize for History (2006), ser miembro de la American Academy of Arts and Sciences y ser miembro extranjero de la Royal Netherlands Academy of Arts.

Más allá de haber incursionado en muy diversos temas, es posible trazar una trayectoria muy nítida en los tópicos tratados en sus investigaciones. Se inició en la investigación estudiando problemas de atraso relativo. Uno de ellos fue la tardía industrialización de Bélgica y Holanda (*Industrialization in the Low Countries*, Yale University Press, 1976), comparada con la de Inglaterra. Otro fue el fuerte contraste entre Inglaterra e Irlanda, especialmente la comprensión de las hambrunas en este último, en la primera mitad del siglo XIX (*Why Ireland Starved*, Routledge, 1983). Los estudios de estos casos de tardía o fallida industrialización llevaron a Mokyr a concentrar sus esfuerzos en entender más profundamente la propia industrialización inglesa, la Revolución Industrial. Sus estudios contribuyeron a desatar una fuerte polémica y a promover la investigación sobre el tema, que encuentra una primera colección de aportes en su edición de *The Economics of the Industrial Revolution* (Rowman and Littlefield Publishers, Inc., 1985) y una obra de síntesis en otro libro de su edición y en el que escribe un potente capítulo introductorio (*The British Industrial Revolution. An Economic Perspective*, Taylor and Francis, 1996). La Revolución Industrial lo acompañará hasta el presente y, a su vez, lo llevó a interesarse por el desarrollo de la ciencia, la tecnología y la innovación de manera más general, y a colocar la Revolución Industrial en el contexto de estos desarrollos a lo largo de la historia. Así, en *The Lever of the Riches. Technological Creativity and Economic Progress* (Oxford University Press, 1990) se describen e interpretan 25 siglos de cambio tecnológico. Sobre la base de semejantes trabajos de gran cobertura temporal, volvió luego a concentrarse en la propia Revolución Industrial. En *The Gifts of Athenea* (Princeton University Press, 2004), aborda el surgimiento y funcionamiento de la economía del conocimiento, basada en la aplicación sistemática de lo que llama el conocimiento “útil”, que ha dominado la vida de los dos últimos siglos. En *The Enlightened Economy. An Economic History of England 1700-1850* (Yale University Press, 2009) vuelve a discutir detalladamente los diferentes modelos interpretativos de la Revolución Industrial, a la vez que presenta un enfoque sumamente abarcador de muy diversos aspectos de la economía y sociedad británica entre 1700 y 1850. Más recientemente, concentró sus esfuerzos en comprender el proceso previo a la Revolución Industrial y cómo se sentaron sus bases, en *A Culture of Growth. The Origins of the Modern Economy* (Princeton University Press, 2018).

A lo largo de este periplo, Mokyr fue procesando cambios muy radicales en su forma de ver las ciencias sociales y la historia, así como en sus marcos teóricos y estrategias de investigación. Sus jóvenes trabajos sobre los Países Bajos e Irlanda, y aún sus primeros trabajos sobre la Revolución Industrial, es-

tán claramente enmarcadas en la irrupción en el estudio de la historia económica de la entonces llamada Nueva Historia Económica o Cliometría. Esta corriente se basó no solamente en el uso sistemático de métodos cuantitativos, sino primordialmente en la aplicación rigurosa de la teoría económica para interpretar la historia. Y la teoría económica de entonces era, predominantemente, la economía neoclásica. Mokyr fue uno de los más importantes exponentes de esta corriente.

Sus estudios sobre la Revolución Industrial parecen iniciar a Mokyr en una trayectoria un tanto diferente. Su disconformidad con los diferentes modelos propuestos para interpretar la Revolución Industrial es manifiesta, al punto de tener la valentía de reconocer, después de décadas dedicadas a su estudio, que aún no contamos con una firme interpretación y explicación del proceso. Más aún, sus trabajos meticulosos lo llevaron a concluir que, en realidad, nunca tuvo lugar algo parecido a una Revolución Industrial, sino un conjunto de hechos vinculados, que transcurrieron a lo largo de un período prolongado de tiempo, que no tuvo un impacto inmediato en las tasas de crecimiento y que no fue percibido por los contemporáneos como una revolución. No por ello deja de tener sentido, según él, hablar de la Revolución Industrial para referirse a ese largo período.

La dificultad para encontrar explicaciones simples de la Revolución Industrial llevó a Mokyr a adoptar cada vez más un enfoque interdisciplinario de las ciencias sociales y a concebir a la Revolución Industrial no como un resultado inevitable de un proceso acumulativo natural, en el que toda sociedad desembocaría, sino como una especie de milagro histórico, como un resultado evolutivo no predeterminado. Es al confrontar la Revolución Industrial con 25 siglos de historia de la tecnología y el progreso económico, que esas características de la Revolución Industrial aparecen más marcadas. En *The Lever of the Riches* sostiene que desde el siglo XIV es posible notar que Europa Occidental había aprendido todo lo que podía aprender de otras civilizaciones y que iba en camino a desarrollar una cultura de la innovación, que progresivamente iría a contribuir, con otros factores, al fenómeno de la Revolución Industrial. Así comienza un periplo, en el que los factores culturales e institucionales irían a jugar un rol explicativo central del proceso evolutivo, en contraste con otras explicaciones que atribuyen la Revolución Industrial predominantemente a factores geográficos o puramente económicos (dotación de factores y precios relativos), o bien a factores culturales de otra índole, como la religión o las llamadas virtudes burguesas. En su caso, es la cultura de la aplicación del conocimiento y la tecnología, para el dominio de la naturaleza y la mejora de las condiciones de vida, el componente explicativo central de la economía del conocimiento, elemento no dominante en la mayoría de las civilizaciones.

A esta altura Mokyr ya estaba muy lejos del joven que había recibido críticas por creer mucho en los modelos teóricos y visitar poco los archivos. Se ha transformado en un erudito, curioso por los detalles, pero capaz de extraer de ellos profundas visiones y una comprensión amplia de los procesos. En *The Gifts of Athenea* desarrolla su renombrada división del conocimiento “útil” entre conocimiento “proposicional” y conocimiento “prescriptivo”. El primero es de carácter general, teórico; el segundo es el conocimiento de las técnicas. El crecimiento económico moderno, sostiene, es el resultado de un conjunto de normas e instituciones que promueven activa y racionalmente la búsqueda de conocimiento proposicional y su aplicación al descubrimiento de conocimiento prescriptivo. Sin los avances en el conocimiento proposicional sería imposible su empalme con el conocimiento prescriptivo, que daría lugar al crecimiento sostenido.

Cuando vuelve a concentrarse en la Revolución Industrial en *The Enlightened Economy*, la ilustración pasa a ser el componente explicativo central. El balance entre la determinación de las condiciones materiales de vida de los individuos y sus intereses creados, por un lado, y el mundo de las ideas y el conocimiento, por el otro, es visto como complementario y el desenlace circunstancial. Para la Revolución Industrial, el fenómeno de la Ilustración fue decisivo, por lo que Inglaterra deja de ser el principal objeto de estudio; la Revolución Industrial pasa a ser un proceso de la Europa Occidental y el liderazgo inglés solamente circunstancial.

En el muy reciente *Culture of Growth*, Mokyr vuelve atrás y se pregunta sobre las condiciones que hicieron posible la ilustración y la Revolución Industrial y que emergiera la cultura de la permanente

superación de las condiciones de vida mediante el conocimiento de la naturaleza y sus regularidades y de la aplicación de esos conocimientos a la actividad productiva. Vuelve a insistir en que la historia económica y la historia de las ideas han sido dos disciplinas que se han cultivado en paralelo, con poca interacción recíproca. Así, se concentra en el período que llama “entre Colón y Newton”, para entender cómo se procesa un cambio cultural radical en una élite intelectual. Así, Mokyr recurre a la historia intelectual y de la ciencia y la tecnología, para responder a la pregunta principal de los economistas: cómo explicar el crecimiento económico moderno. Al igual que muchos otros historiadores económicos y economistas, cree que las explicaciones económicas están, en gran medida, fuera de lo que algunos economistas llaman la economía propiamente dicha. Por ello, algunas críticas a su actual producción se orientan a la falta de demostración empírica rigurosa de sus conclusiones, entendiéndolo por ello la modelización cuantificable y el testeado de hipótesis.

Mokyr es, sin dudas, un académico que ha protagonizado cambios radicales en nuestras formas de ver la historia, la historia de las ideas y la ciencia y la historia económica. La Revolución Industrial, en sus aspectos fundamentales, es un fenómeno que transcurre hasta nuestros días. Entenderla es un desafío esencial para los países en desarrollo. Sus enseñanzas son centrales para comprender las limitaciones intrínsecas de procesos de desarrollo basados en la copia tecnológica sin el desarrollo paralelo de la capacidad de producir conocimiento proposicional y prescriptivo y del riesgo del divorcio entre ambos. A su vez, la crisis ambiental actual nos enfrenta a la pregunta de si los principios de la economía del conocimiento pueden ser compatibles con un continuo aumento del bienestar humano en el espíritu de la Revolución Industrial, o si un cambio paradigmático es inevitable.

Joel Mokyr ha sido una referencia permanente en la actividad académica de quienes pensamos y abordamos las interpretaciones del desarrollo en el largo plazo. Sus ideas forman parte de una comunidad epistémica de la que forman parte muchos estudiosos del desarrollo y la historia económica latinoamericana. Un reconocimiento como el que le brindó la Universidad de la República confirma las virtudes de una trayectoria intelectual brillante.

En ocasión de recibir el título de Doctor Honoris Causa, el Prof. Joel Mokyr dictó la Conferencia Magistral que transcribimos a continuación.

CONFERENCIA MAGISTRAL

Madam Provost, Madam Dean, Professor Bértola, esteemed members of the faculty and honored guests, ladies and gentlemen:

I am deeply honored and humbled to stand before you today to receive an honorary degree from the University of the Republic of Uruguay in Montevideo. Having been born in one small rich country and grown up in another, I have actually thought quite a lot about the economic successes of small open economies, from Switzerland to Denmark to New Zealand, and I am especially pleased to be here tonight in a country that is a shining example of such successes.

I have spent my career working in economic history, a truly interdisciplinary field that is located primarily in Economics departments, but with a clear presence in History, with strong connections in Political Science, Sociology, and Business Schools. The field should not be confused with the History of Economic Thought, which examines the writings of writers on economic theory of the past. Economic historians examine past economic conditions, such as markets, taxation, demographic fluctuations, living standards, income distribution, and production technology.

Today I shall try to answer only one question, and it is a self-serving one: Why should one study economic history? For the historians, the answer should be obvious. Economic history is about the material

fabric of life: it is about how humans over the ages coped with the biblical retribution that in the sweat of thy brow thou shalt eat bread. It is how people struggled with a recalcitrant and often hostile environment, trying to get their families to survive hunger, cold, and disease. It is concerned with taxes and rents and the many other forms by which the strong and the powerful extracted resources from the poor and the weak. But it is also about the miracles of human cooperation and ingenuity to create wealth and security. It is about how markets and exchange worked, lubricated by human inventions such as money, contracts, and corporations. It is about how slowly but certainly humans came to understand the laws of physics, chemistry, and biology and harnessed them to their needs to produce engines, antibiotics, steel, and sausages.

For the economist, economic history should be studied for the same reason that evolutionary biologists should study paleontology. As every biologist knows, 99% or more of all species that ever existed are extinct. Excluding the past from the study of living beings would limit the scope of inquiry to a small part of the available information. The same holds for economics. The historical record of economies over the entire span of the past offers a panel of vastly richer and more diverse data than the present world by itself. If we are to understand how economies work, we cannot throw away 95 percent of all observations even if the record of past societies is often little more than the documentary equivalent of a few bones or teeth of now-extinct entities.

The past provides the economist and social scientist with a laboratory to examine phenomena that modern environments cannot. An economist studying today's world will not encounter many institutions prevalent in the past, such as feudalism, formal and open slave markets, and blatant colonialism. Human demography followed very different rules. Today you cannot find many examples of systems that obey the dismal and gloomy laws of Malthusian dynamics, when any economic advance was supposedly undone by relentless population growth. Demographic shocks such as the Black Death, which in a few years wiped out a third of Europe's population provided a fine "experiment" to social scientists, and mercifully will never be repeated. Or so we hope. More recently, we can and should study the economics of totalitarian collectivist economies such as the Soviet Union, or manorial economies, in which the ownership of land and access to it were the dominant issues in the economy. On a more mundane level, past economies, far more than today, were dominated by domesticated and working animals. Horses, buffalo, donkeys, camels, and oxen were crucial forms of capital, determining who was rich and who was not. Their absence, it has been argued, would lock economies into certain trajectories. The study of extinct economies sheds light on how economies operated in conditions that our own world cannot replicate.

Perhaps most striking and insufficiently emphasized, the economies of the past were almost entirely organized as what we could call today "gig economies." Before the Industrial Revolution, the world did not have many "firms" as we know them today. The Industrial Revolution brought us economic growth and higher living standards, and it also gave us the "factory" –not just manufacturing plants but also office buildings, department stores, and warehouses, in which workers came from the outside at an assigned time, and subjected themselves willingly to a regime of discipline and a hierarchical structure with people who were not related to them. Before that, the firm was the family and the family was the firm. Farmers worked on their fields, artisans in their workshops, and merchants in their stores. Production was carried out by the household, even if they produced for the market. Apart from apprentices, journeymen and servants, most people usually worked for themselves in their households, setting their own hours and work environment. If there were employees, they were more like Leporello than like Charlie Chaplin. If today the gig economy is indeed growing thanks to modern technology that makes telecommuting as well as organizations like Uber and Airbnb possible, we should note that the pendulum is swinging back to an earlier time.

The other economic subject that makes studying the past so different from studying modern economies is that until a few centuries ago "the state" meant something quite different from today. There were always rulers, and people paid taxes, but in the vast majority of cases there was no presumption that the rulers were supposed to do much for the economic welfare of their subjects in exchange except guard them from invaders and, if they could, alleviate the worst forms of starvation. This odd idea, that

the state was supposed to provide the citizens with public goods that increase the economic well-being of the citizenry at large like law and order, contract enforcement, education, infrastructure, intellectual property rights, public health, social security, and funding for scientific research –to name a few–, is by and large an Enlightenment notion. Some of it in embryonic form could be found in ancient Rome, in Europe after the Reformation, and in China as part of the Imperial bureaucracy, but more often than not, such activities were aimed at the welfare of the ruler, his dynasty, and a few cronies. Until then, apart from a perfunctory justice system, the state spent the vast bulk of its income on the military and the conspicuous consumption of the ruling clique. As a result, most services that a modern person would expect from the state in the past were supplied privately, by religious organizations, or not at all. Such private-order organizations often worked quite well — but today we are too accustomed to the “government” regulating and supervising the economy, protecting consumers and borrowers, licensing businesses, and providing us with many essential services, for better or (more often) for worse.

Economic history is, by its very definition, an interdisciplinary field. It is, in reality, even more interdisciplinary than it sounds. Economic historians have to know, of course, economic theory and econometrics, know the history of the economies they study, and be able to read original historical documents often in dead or obsolete languages and scripts and decipher primary archival manuscripts sources, as well as know foreign languages. They need to have a “sense of history” –realizing intuitively what daily life in the past was like. They also have to be numerate: trained in quantitative methods and advanced data analysis, and often many of them have to be versed in other areas that relate to their specific research such as nutritional science, agronomy, medicine, engineering, and many other areas. The best economic historians are jacks of all trades and the masters of many.

I have kept the most important reason for the end. Above all, economic history should be taught in order to remind intelligent and thoughtful people that the best time in history to be born on our planet is today. The Good Old days may have been old, but they were never good. In premodern societies, as we should remind everyone with an interest in the human past or present, for the vast majority of humanity daily life was bleak, uncomfortable, and joyless. Death, pain, hunger, disease, and fear were far more omnipresent than today. Most people in the past were poor, not in the sense we think of poverty today, but through the absence of the basic necessities of survival, the poverty of homeless and starving beggars, of peasants for whom backbreaking toil still often ended in harvest failure and famine.

The results were in plain sight. By our standards, most people in the past were remarkably short, mostly skinny and malnourished, sickly, and suffered from bad teeth, bad skin, bad odor, and often fleas, lice and other vermin. Women had a particular miserable existence in many past societies: traditionally oppressed by their husbands and male relatives, toiling both at home and in the fields, they were condemned to an adulthood of many pregnancies, which often ended in miscarriages, stillbirths, or children who died before their fifth birthdays, breaking their mothers’s hearts. The idyllic image of noble and good-looking savages and peasants rollicking about merrily on green natural pastures surrounded by butterflies and flowers unencumbered by the horrors of modern technology, propagated by nostalgic but poorly-informed writers from Rousseau to Heidegger, are complete myths.

Of course, there were some well-to-do people in the past, those who could live in stone houses, eat meat, listen to symphonies, and buy paintings. But these were almost never more than a few percentage points of the population. In today’s industrialized countries the lower middle-class citizens enjoy a material standard of living far better than the popes and emperors of the Renaissance: they are healthier and more secure, they eat and drink better, are warmer in the winter and cooler in the summer, and have vastly greater access to culture, information, and entertainment. It is the task of economic history to sound a bell of optimism: our world is far from perfect, but it is in many quantifiable and measurable dimensions better than world that was.

Between the bad old days and our own age stands the Industrial Revolution. Apart from the fact that it happened, much of its significance is still in dispute. As I see it, the Industrial Revolution is to economic history what the rise of Christianity was to the history of monotheistic religion. Christianity was not

the very beginning of monotheism any more than the British Industrial Revolution was the beginning of mechanization and the use of fossil fuels, but in economic history “degree is everything” –from small enclaves and specks in the English midlands, mechanization and factories spread to become the dominant shape of production, mercilessly squeezing out older forms. Much like Christianity that started in a small and rather remote part of the Roman Empire, the Industrial Revolution started in a few provincial counties in England and Scotland, far from the great and cultured cities of Paris, Venice, and Amsterdam. But its advance was relentless, basically because it had discovered something that worked better than what there was before.

What the Industrial Revolution has done, as basically every professional agrees, is to refute the famous line in Deuteronomy 15:11, “For there will never cease to be poor in the land; that is why I am commanding you to open wide your hand to your brother and to the poor and needy in your land.” The ineluctable truth in today’s world is that from a purely technological point of view there is no need for poverty to be present anywhere. If there is poverty, it is not—as economists have traditionally thought—because we simply cannot produce enough to allow every person on this planet to live a decent existence, be properly fed, housed, and educated. Modern economies can produce enough, so that there does not have to be poverty in Chicago, Buenos Aires, or perhaps even Mumbai. After all, poverty is all but absent in Zurich, Dublin, Oslo, Tokyo, or Munich. Where it is still present, it is because our institutions in some way have failed us.

And perhaps here is what every economic historians end up thinking about, for better or worse: technology, productivity, and living standards have advanced relentlessly in the past two centuries, punctuated only by human idiocy such as colonialism, two world wars, and totalitarianism. Every economist understands the concept of technological progress. Note the idea of “progress”: there is a trend here—things are getting better. The reason is that technology is knowledge, and knowledge is cumulative. We can know what earlier generations knew, but they could not know what we know. Einstein knew more than Newton, Newton knew more than Ptolemy. But when it comes to human affairs and governance, to the way our institutions are designed and operate, an upward trend is much more questionable. Has there been sustained institutional progress? Is Putin’s Russia in some ways better than Augustus’s Rome? Is Xi’s China enlightened relative to the Song dynasty? Who is more corrupt and bloodthirsty, Rodrigo Duterte or Caligula? Are families and communities and social connections in 2018 in some way better than in the past?

Like every field of inquiry, normal science consists of answering less ambitious questions. In economic history, the range of questions is especially rich, because they are distributed in three dimensions: time, space, and subject. Our age is the era of big data: advanced empirical models using “deep learning” and sophisticated estimation methods are ruling economics; economic history is part of that movement. My students have far more observations and fancier techniques than my generation ever dreamed of, and they are reconstructing the past, datapoint by datapoint. They will continue to study the economic past with ever-more powerful tools, for all the reasons I mentioned, and one more. The last one is the best of all: we humans study our history because its outcomes are alive all around us. As William Faulkner said, “the past is never dead. It’s not even past.”