**John Torpey** 00:05

Welcome to International Horizons, a podcast of the Ralph Bunche Institute for International Studies that brings scholarly and diplomatic expertise to bear on our understanding of a wide range of international issues. My name is John Torpey, and I'm Director of the Ralph Bunche Institute at the Graduate Center of the City University of New York.

**John Torpey** 00:25

Today we discuss the state of global shipping in the aftermath of the recent grounding of the Ever Given container ship in the Suez Canal. We're fortunate to have with us today two experts on the subject: the economic historian Marc Levinson, and the anthropologist Liang Wu.

**John Torpey** 00:44

Marc Levinson, formerly a journalist with the Economist, among others, has a PhD in history from the CUNY Graduate Center, and is author of the book "*The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*", which explains how a seemingly simple innovation made globalization possible. His current project "*Outside the Box*", a sort of sequel to "The Box", argues that globalization is far from over and that is instead moving into a stage in which the flow of ideas and services will be much more important than the flow of boxes filled with goods.

**John Torpey** 01:24

Also with us today is Liang Wu, a doctoral candidate in anthropology here at the Graduate Center of the City University of New York. Since 2006, so for 15 years, he's been studying the international shipping industry and the lives of multinational seafarers on ocean going container ships by working at various seafarer centers in Asia and North America, visiting merchant vessels that pass through ports and interviewing seafarers, representatives of shipping companies and other maritime workers.

**John Torpey** 01:58

His dissertation examines the experiences of contemporary seamanship, including the postwar development of containerization, the changing society and culture of port cities and the ways seafarers navigate their overseas relationships, job conditions and international law. He was recently named the recipient of the Ralph Bunche Institute's annual Dissertation Fellowship Award, which led me to invite him to join this conversation. So thanks so much for taking the time to be with us today, Mark Levinson, and Liang Wu.

**Liang Wu** 02:34

Thank you very much for having us.

**John Torpey** 02:36

Great to have you both. So let's start with the Ever Given. When this enormous container ship ran aground in the Suez Canal in late March, it seems that something like 400 ships were backed up behind it and forced to try to decide whether to wait it out until the ship was freed, or to take the long route back around the Cape of Good Hope as sailors did before the Canal was built. The backup was estimated to cost $10 billion a day. So can you tell us how container shipping became such a big element of the modern economy? Perhaps we'll start with Marc Levinson.

**Marc Levinson** 03:15

Thank you very much for having me, John. Container shipping has been around since 1956, in its current form, and internationally since the late 1960s. And over time, it has grown remarkably. Container shipping dramatically decreased the cost of moving goods internationally and improved reliability. It seems like a simple idea; rather than putting every barrel and bag and box separately on board a vessel that you put all these little parcels into a single big metal container and put the container aboard the vessel, and then you can transfer it easily to a train or a truck at either end of the voyage.

**Marc Levinson** 03:58

And as this developed, it enabled manufacturers and retailers to begin to build long distance supply chains. There were some other factors that were quite important in this, too: obviously the declining cost of telecommunications, the improved capability of computers to keep track of things. And as a result of these developments, along with the growth of container shipping, you started to see a new sort of international trade in the late 1980s.

**Marc Levinson** 04:29

Traditionally, international trade had involved mainly commodities going from poor countries to richer countries, and then manufactured goods moving among the richer countries and being shipped from there to the poorer countries. But starting in the 80s, because of these changes in shipping costs and communications costs, manufacturers and retailers could arrange to make particular products wherever it seemed cheapest.

**Marc Levinson** 04:56

They could build these long supply chains going across the oceans, and in some cases, make a component in one country and have that component shipped to a different country and have the finished goods shipped to different country still. In many cases, these supply chains got to be quite complicated. That's the way most manufactured goods are made these days. And so, of course, when these long supply chains are interrupted, then there can be some serious problems.

**Marc Levinson** 05:25

I think one of the the things that has now become clear to everyone is that when they started to build these supply chains, manufacturers and retailers tended to look at differences in the production cost and transportation costs; they didn't really look at risks. They said, "okay, wages are cheaper in China, or Cambodia, or Bangladesh. And so we will make this product there. And we can get it to the United States or in Europe, or to Japan much more cheaply." They didn't really ask themselves, what happens if the port is blocked, or if the ships can't get through the Suez Canal. And it turns out that that sort of thing happens fairly often. And once you work the risks into the the calculation, then some of these supply chains don't make so much sense anymore.

**John Torpey** 06:13

Well, it seems to me the pandemic has also opened our eyes to some of the problems with these global supply chains. We suddenly discover that in a crisis, we don't have enough PPE (Personal Protective Equipment) on hand here. And indeed, it's made by what we sometimes think of as our kind of frenemy China, which was the source of the problem and not necessarily dealing with it as openly as it might have. And those kinds of things that may be having its own set of interests as far as where that PPE should go, namely, perhaps to its own people, rather than to taking care of the United States.

**John Torpey** 06:50

So, I mean, there's probably much to say about the dangers and sort of pitfalls of globalization that we can get into. But I want to ask Liang Wu to talk a little bit about how the containerization of the world has affected workers on on these ships, which probably for most of us our familiarity with these issues comes down to seeing the Tom Hanks movie about getting pirated somewhere off the Somali coast. So, could you say a little bit about how this looks from the point of view of workers on these boats, Liang Wu?

**Liang Wu** 07:30

Yeah, Sure. So, I'm glad you asked, because workers on board merchant vessels in general, they have been very much rendered invisible even though they are indispensable. Of course, you know, the exact actual life on board depends on different factors: like the vessel type, like the shipping route and the seafarers' job rank, nationality and all that. But in general, yeah, life on board is very much routinized and regimented. Like, they have to follow certain schedules, they are working for contracts for months on end. And the workplace is also their living space, their social space.

**Liang Wu** 08:17

And, onboard a typical container ship nowadays, which can be as large as the Empire State Building when we look at Ever Given. You have around 20 people operating a large object and machine in the middle of the ocean to carry cargo between different ports. It is a pretty dangerous job and an isolating experience for a lot of seafarers, especially after the crew size has been minimized with following more than 10 economic developments, including containerization.

**Liang Wu** 08:51

And, when we were bored at home during the lockdown, we were in Netflix seeing, we were on TikTok. So those were luxuries for seafarers; internet phone services are largely absent or limited at sea. And many seafarers, they are married, they are married with kids, so they go to sea to provide a better life for themselves and their family; their loved ones. So they are homesick from time to time.

**Liang Wu** 09:19

The only chance of changing their environment is when the ships call at a port. But then during the turnaround time, the cargo handling time can be pretty fast at some ports because of the efficiency brought by containerization and other shipping developments; leaving them with little to no time to possibly take a short leave.

**Liang Wu** 09:39

And a lot of ports are also built further away from the urban centers. And in the post-9/11 world, short leave is further restricted in the name of security. So today's seafarers, as I were arguing in my dissertation too, they're always at sea. And the isolation that's trending has only been exacerbated due to the pandemic.

**Liang Wu** 10:02

Since last year, there were there were like hundreds of thousands of seafarers stranded, both sea and on shore. And it's because states around the world, they demand continuous overseas cargo of everything; from fuel to food and medical supplies in order to sustain our populations and survive this pandemic.

**Liang Wu** 10:25

But in trying to control the pandemic, the states are also simultaneously closing their borders, restricting international travel, banning shore leave and crew change at ports. So some seafarers have already worked at sea for more than a year with no end in sight, even after they have already completed their contracts. So it's an ongoing humanitarian crisis. And it's an intensification of something that is pre-existing.

**John Torpey** 10:52

I mean, it's interesting in the sense that, you know, many of the so-called essential workers that we've allowed, so to speak, to continue to work have also been among the least well paid workers, and some of them those in the in the worst kinds of jobs, really. And it sounds like workers on container ships and on shipping, where they could be at sea for a year at a time, might be included among that group.

**John Torpey** 11:21

But I wanted to get back to the point about the $10 billion a day seems to have been at stake while this boat was stuck aground in the Suez Canal. I mean, what does it really mean for us to be dependent on boats getting through the Suez Canal and other passages like this? As I say, how dependent are we? I mean, my understanding was that the boats going through there, were basically taking goods from Asia on a shorter route than they would otherwise have and delivering them to Europe, and, I believe the United States.

**John Torpey** 12:01

So, it started to sound kind of dire the way after several days, you know, the kind of concern in the voices of commentators began to struck me and began to make me nervous, because it reminded me the early days of the pandemic, and I wonder what you would say about that, Marc Levinson.

**Marc Levinson** 12:22

Container shipping, really changed the way that people consume. It delivered a whole lot more choice; you have access to many, many more products than you used to have from many, many more countries. And the costs of many of these goods have fallen over time, in part because they're often made in low wage countries and the cost of getting them to high wage countries hardly matters; it's just a few cents per item. So there's been a lot of benefit to consumers.

**Marc Levinson** 12:57

However, businesses have also taken advantage of the relative reliability of container shipping to help reduce costs by reducing inventories. There's been a long term trend; your listeners have probably heard of "just in time" manufacturing.

**Marc Levinson** 13:15

The idea of "just in time" manufacturing is you don't keep a lot of stuff in your warehouse; you deliver it to the assembly plant right when it's needed and keep inventory to a minimum. And the same has been true traditionally in retail; retailers have tried to keep their inventories low.

**Marc Levinson** 13:35

And you can see why if stuff sits in the warehouse a while maybe it gets outdated, maybe it's obsolete. And in any case, you've already paid for it, you can't sell it. So inventory costs money. And so there's been this long term trend to reduce inventory levels.

**Marc Levinson** 13:53

Well, the blockage of the Ever Given has pointed out that this can be a problem. If you don't have much inventory, and you don't have the new merchandise arriving, then you don't have anything to sell or you don't have the components you need to deliver to your factory. So this is the trade off of fixing the sorts of problems that came up after the Ever Given's grounding could be done simply by keeping a higher inventory level. But that means higher costs; means higher costs for a company and it means higher costs for consumers. And that's why businesses have avoided keeping inventory.

**John Torpey** 14:32

Right. So Liang Wu, I wanted to ask you about the experience of the workers in this ship. I mean, I'm a claustrophobe, and so the idea of being in any enclosure, however large, kind of makes me nervous. And I would think if you were in a boat, and you couldn't really get to land and you know, I mean, I guess they could have gotten off the boat in some way.

**John Torpey** 14:59

But you're saying that these people are out there on the high seas for a year at a time. And I just kind of wonder what's that like, and how does it differ from -- there are many other kinds of shipping that we talked about before our discussion now. I mean, container ships are huge, huge vessels, and there are many things that are much smaller even, I suppose, cruise ships. But could you talk a little bit about their experience of being in a certain sense kind of prisoners on these boats, and how it varies across different types of shipping?

**Liang Wu** 15:40

Yeah, sure. So, one thing is that seafarers, people working on ships, they are a very international workforce, both in terms of composition and their movement around the world. There are more than 1.6 million seafarers transporting 90% of world trade, but then the irony is that a lot of seafarers they are very much disconnected by connecting the world. And, if you talk to them, yeah, some of them do describe their shifts as like a prison. As I mentioned, before, there was the minimization of the crew size, and there is the lack of internet and phone services at sea.

**Liang Wu** 16:26

And also, as you know, the fast turnaround time and ports and security concerns and all that, which actually, make short leave pretty restricted. And it also makes a lot seafarers are always at sea. And in times like this, when it comes to the Suez Canal incident, so for the seafarers on Ever Given, so they are still on the ship now.

**Liang Wu** 16:56

Ever Given was with loader, but it was still stuck in red tape. We have Egyptian union officials from ITF, International Transport Workers Federation, they have visited Ever Given, they have checked the condition of seafarers on board. The last time I checked, only two of the 25 crew members were allowed to leave as a "humanitarian gesture."

**Liang Wu** 17:21

So for for the rest of the crew and for other seafarers on board, their wish is really just to keep going or go home after their contracts finish. Yeah, but then Ever Given was arrested, it was detained together with the crew, it is under investigation. And there is a lot of finger pointing among the ship owner, the shipping line port forwarding insurance is actually making claims; making contract claims. It is just part of a larger picture of like, seafarers like containment and the abandonment of seafarers. Sometimes, even scapegoating or even maybe criminalization.

**Liang Wu** 18:04

So, yeah, as you mentioned, previously, they are very vulnerable group. And they can be subject to a lot of like, extraterritorial negligence, just by the very nature of that work. But there is also this thing that the shipping industry right now --especially more and more people at the top of the levels of the industry-- they are saying that we must not forget seafarers; we must not forget to quote "the human element of our industry". Because the pandemic has actually made us more aware of the essential reality of these human workers.

**Liang Wu** 18:52

So when their lives are at stake to help shipping businesses is also at stake no matter what type of vessel they are operating, whether it's like container ships or tankers or bulk carriers. So yeah, the pandemic has really, really shown that those who are very vulnerable and marginal can be further ostracized. And human rights and well being I see that mental health have become actually topics of discussion and concerns within the industry among managers; among CEOs, among consultants. They are saying that we need to think about the new normal, right? We cannot do business as usual.

**John Torpey** 19:33

Marc Levinson, do you want to add anything about how container shipping differs from other kinds of shipping?

**Marc Levinson** 19:40

Sure, I think the Ever Given incident have really highlighted for people how complex the business structures are in the shipping industry. Ever Given, as you recall, is owned by a company that's based in Japan. The ship is chartered to a company that is based in Taiwan. The charterer hired a company that's based in Germany to actually manage the vessel, so the workers on board the ship were engaged by this German company. The vessel is registered in Panama, so that it's actually Panamanian law that applies to them. In the case of the Ever Given, as with container ships, in general, these are all big, well known reputable companies.

**Marc Levinson** 20:26

At the end of the day, these workers are going through a lot of discomfort, but they're pretty safe. And they're all going to get paid sooner or later. There are a lot of other ships on the sea, where those things aren't so clear. There are many cases of ships that might be hauling things like iron ore, or cattle, or cargoes like that, where it's not clear who owns the ship; the ownership is very secretive. The owner is contracted with somebody else to run the ship; it's not clear who actually employs the workers.

**Marc Levinson** 21:02

And the conditions are not safe. The workers may have no recourse. Yes, eventually they'll get to shore, but they may not actually be able to figure out who owes the money and collect those wages. So there is a potential for exploitation in some parts of the maritime industry. The container shipping part of the industry is actually probably much better than than certain other parts of the industry.

**John Torpey** 21:29

So I guess I should ask, I'd like to ask a question about piracy. I recall a time, maybe it's ten or so years ago now, where there was a kind of great --it seemed to me anyway-- a kind of great upsurge in concern about piracy around the world; a concern about the relative lawlessness of the seas, a kind of retreat, I guess, from policing the seas on the part of various major powers. I may not have this exactly right, but I do for sure, remember this concern.

**John Torpey** 22:04

And I wonder whether you both could say a little bit about what kind of a problem is that? Is it better or worse than it used to be? What exactly does it entail? I mean, I was sort of puzzled, I have to say, when Tom Hanks' boat actually got boarded? I mean, I couldn't quite figure out how you would do that. So maybe you can tell us a little bit about that problem. Marc, you want to go ahead?

**Marc Levinson** 22:28

Sure. Um, piracy is different than it was back in the olden days; there's always been piracy at sea, obviously. But, back in the days of Sir Francis Drake, the pirates were interested in the cargo. These days, the pirates are not particularly interested in the cargo in general; they're interested in getting ransom for the ship and the people on board the ship.

**Marc Levinson** 22:52

And so the pirates usually don't get on and plunder the containers, it's pretty hard to do that in any case, and it takes equipment to move the containers and you've got to get the ship into a major port to do that. There are all kinds of reasons the pirates are not actually dealing with the containers; they're taking the crew hostage, they're taking the vessel itself hostage, and they're saying to the owner, "you give us money, if you want to get your people or your ship back,"

**Marc Levinson** 23:19

The way to deal with that, in general, has been to put armed guards aboard the ship. Merchant ships typically don't carry security people aboard. But it's been necessary on certain routes to put armed, and in some cases heavily armed security people on board so that if the vessel is approached by a smaller boat that's behaving suspiciously, they can react.

**Marc Levinson** 23:48

The smaller boat is trying to get right up next to the big ship, and people are trying to use hooks to climb aboard. As I mentioned, the number of crew members on these large vessels is small, in some cases, as few as 20 people in the crew of container ship. And so if the group of pirates is able to get some people on board the vessel, it's actually possible to take it over and divert it pretty easily. So ship lines have dealt with this by security. And that obviously increases costs but it's cheaper than paying ransom.

**John Torpey** 24:25

Liang Wu, do you want to add anything?

**Liang Wu** 24:28

Yeah, I totally agree with Marc and I'm just going to piggyback on his comment and his analysis. The containerization of cargo has actually also changed the nature of piracy. So it's not so much about taking the cargo but the kidnapping of seafarers to demand ransoms.

**Liang Wu** 24:48

And the shipping industry right now are also talking about new kind of piracy. The hackers can be the new pirates in the future, because two of the latest trends of development in the shipping industry is decarbonisation and digitalization. So, when it comes to digitalization of shipping operation, which is very much about integration of supply chain, data generating and sharing automation and other so-called Fourth Industrial Revolution developments. One concern is cybersecurity, and the hackers can be the new kind of pirates. If the personnel, if the systems are not well trained and prepared enough, they can be technologically blindsided. It could create new vulnerabilities.

**Liang Wu** 25:36

So, there was a whole lot of like discussion going on and research going on about that. How can we prevent, how we can reduce that kind of technological risk and how do we train our human element? How do we prepare them for the future technological changes like regulatory changes?

**John Torpey** 25:57

Fascinating. I mean, just as a sort of an aside, since you're both Graduate Center PhDs or PhDs in the making, I am struck by the extent to which each of you has spoken in a way that Max Weber would have understood perfectly well. In other words, that this containerization of shipping is all about the process of rationalization --what he called rationalization. One component of which is standardization, right? I mean, I think somewhere I saw something to the effect that all containers are either 10, 20, 30, 40, 50 feet long. And in practice, they're mostly 20 feet long.

**John Torpey** 26:38

Now, maybe that number is not exactly right. But the point is that in order to get from picking individual pieces and items, and moving them kind of by hand, and using these containers. And then you talk, Liang, about the sort of routinization of the job of the work on the boats. All of that is a move in the direction, as I say, of what Weber calls rationalization, which I don't know if that's something you want to comment on, but definitely strikes me as a major step that as Marc has pointed out, simplified and cheapened --massively cheapened-- the cost of transporting goods around the world. Any comments?

**Marc Levinson** 27:25

Yeah, that's true. And certainly standardization was an important part of the development of what is now called intermodal shipping of the standard shipping container is 40 feet long. It's got a certain fitting at each corner, so it can be lifted by any crane anywhere in the world. And that is really the reason that container shipping has been so successful.

**Marc Levinson** 27:51

But there's some problems that this introduces, and I'm not sure that Max Weber quite dealt with them. One is that once you've put a standard in place, it can be very, very difficult to change. And that's happened in container shipping. The standard shipping container, as I said, is 40 feet long; that length was dictated in good part because at the time container shipping developed, that was typically the maximum length for a truck trailer in the United States and in Europe.

**Marc Levinson** 28:25

Well, now you can have longer truck trailers in the United States. And so a 40 foot container is actually inefficient; many of the containers that move domestically in the United States, that don't go on ships, are 53 feet long. So one driver can haul more goods.

**Marc Levinson** 28:44

But it's very hard to change the international aspect because you've got this fleet of container ships -- 5000 of them -- and they're all built to handle 40 foot containers. They're not built to handle 53 foot containers.

**Marc Levinson** 28:57

What comes out of that? There is an entire business, mostly in Southern California, at which companies located near the docks, bring in 40 foot containers, open them up, remove the goods, put the goods into 53 foot containers and then attach the 53 foot containers to trucks and the trucks drive away. Okay, this may seem a silly business, but it's the result of being locked into a standard, that used to be a great standard, and now is somewhat of an outmoded standard, but one that can't very easily be changed.

**John Torpey** 29:32

For what it's worth, Weber said with regard to bureaucratization, which is of course a form of standardization of how you deal with people, he said once that kind of system is put in place, it's almost impossible to get rid of. So I think he was anticipating some of these kinds of possibilities, but Liang, do you want to say anything about this?

**Liang Wu** 29:51

Yeah, so I very much agree with Marc and I think there is this durability of the container shipping infrastructure. The whole shipping industry, the system really involves a lot of like huge capital investments; and standardization is one of that. With this kind of transnational space created by the intermodal container, as Mark has mentioned, the container can be moved across different modes of transportation between ship, chain, truck and plane. It has really led to the formation of an interconnected logistic spaces in the post-war international economy.

**Liang Wu** 30:32

So that's why even when it comes to the latest trends of decarbonisation and digitalization there are a lot of concerns about whether we should invest in this new technology and stuff. It will require a lot of money and capital and research. So they're very much aware that, for example, decarbonisation really requires not only motivation, but regulation, some sort of standardization to create a level playing field. It requires both a paradigmatic shift and practical tactics to decarbonize. So with this kind of mega scale industry going on, really, the standardization itself can both be a benefit and a hindrance to the development of shipping industry.

**John Torpey** 31:31

Well, thanks for entertaining my Weber obsessions, but we can move on to things that are more really in your wheelhouse. And one thing that struck me in your comments and some of the things you've written, each of you, is the comments you've made about the consequences of containerization for port cities. And I may get wrong who exactly said what, but one of the things that I was struck by was how this seems to have transformed New York, not only as a shipping hub, but also as a manufacturing location. Because much of the shipping moved over to closer to where I live, namely, in Newark and Elizabeth, New Jersey. And as a result of that; as a result of the kind of removal of the shipping aspect of the supply chain, if you like, the manufacturing, within New York also tended to shrivel up and kind of disappear.

**John Torpey** 32:32

So these are enormous consequences of transformation theoretically only in the world of shipping, that actually have shaped the ways in which new cities have arisen and the way in which the economies of these places have been affected. So I'd be interested to hear you each, you know, say a little bit about what you think about that. Mark?

**Marc Levinson** 32:59

There's no doubt that containerization has changed economic geography very significantly. Most of the world's manufacturing now occurs in Asia, that wasn't the case in the 1960s and 1970s. Containerization made that possible. Without container shipping, nobody would have these long supply chains that often bring goods from one Asian country to another and from Asia to Europe or North America. So the container has been very important in that.

**Marc Levinson** 33:32

And as Liang pointed out, even within urban areas, the port has moved out of the city and into the into the edge of the city usually, because you need a large area of land in which to store containers. And this simply was not possible in say, Greenwich Village, back when that's where the docks were.

**Marc Levinson** 33:55

I think one thing that's striking when you look at this phenomenon around the world is that economic change takes a lot of time. If you drive around Brooklyn now, you can say, "Boy, this is great. Brooklyn is a cool place. There's all this stuff happening". And it's true. But it's also true that the economic stuffings were knocked out of Brooklyn in the 1970s. And for a good 20 or 30 years, Brooklyn was a very poor place because of the economic changes made by containerization. Yes, communities adjust, they find a new economic life, they find a different purpose, and that's important. But it takes a while, it's not instant. And I think sometimes we forget that economic change can be hard and slow.

**John Torpey** 34:47

Liang?

**Liang Wu** 34:48

Yeah. That's a fascinating analysis. And it's a very interesting question too. So I would say that different port towns and cities of course they have their own history, their context and specificities. But I guess it is fair to say that there is an intricate relationship between sea and society.

**Liang Wu** 35:07

A lot of the towns and cities have flourished around ports. When you look at some of the major global cities like London, New York, Singapore and Hong Kong, they were they are ports. There is a inextricable relationship between sea trade and the development of these cities. And in the hinterland, too. So, it takes time, as you Mark mentioned.

**Liang Wu** 35:28

But that is another irony here that we have never seen. We have never been this dependent on maritime trade, and yet there seems to be very widespread sea blindness, so to speak, among many port towns, even among many port towns in cities. Well, of course, it has something to do with the transformation of ports themselves including their location and the nature of the operation; there is a reduction of social interaction at ports thanks to technologies and security, right?

**Liang Wu** 36:01

When you look at the old finger piers of like, New York, in Manhattan for example, like those in San Francisco too, they have become obsolete for container shipping. There is a limited space for these piers, they're very close to the developed downtown area, so they cannot accommodate and handle the capacity of containerization, which requires large, relatively inexpensive waterfront areas with deep harbors. So, as mentioned before, a lot of the port activities in New York have been relocated to Newark, to Elizabeth, right.

**Liang Wu** 36:38

So it's a big contrast with ports in the old days. In the old days, maybe ports are more like markets, where different people interacted and exchange, among them were salespersons, dock workers, longshoremen, spending days or weeks to load and unload cargo because you know, cargo had to be loaded, unloaded, piece by piece. It's a very labor intensive process before containerization; the sailors they will be disembarking at ports during this time, they will be like walking in the streets, staying in sailor towns for days or weeks before the next voyage. And there were a lot of like associated businesses, everything from boarding houses to bars to banks.

**Liang Wu** 37:25

So today's ports are a very different world. It's very sanitized. It's a world of like mega structures of cranes, moving containers overhead. You have like armies of carriers and trucks driving to and fro; you have stacks, after stacks of containers. It is a highly restricted and privatized space of mechanical operations, and it's closed off to unauthorized visitations.

**Liang Wu** 37:53

So it's inherently dangerous to walk in the ports. There is little to none pedestrian or passenger facilities. And for the seafarers on board other than the customs for state officials, they have very few ship visitors, with the exception of visitors from seafarer centers that are often run by different maritime industries around the world. So it's a very different kinds of community and ecology at the port. It's very de-socialized, even though we have never been this socially dependent on shipping and seafaring.

**John Torpey** 38:29

Fascinating, and really huge, huge transformation of these places as a result of this change in in shipping. So I guess I kind of want to ask one last question. And that has to do with what we might regard as a negative externality; another negative externality of containerization. And that is all these leftover containers, and what to do with them.

**John Torpey** 38:53

So when I go down to the ocean at Asbury Park, any of you who have been down there at the boardwalk may know that there are various businesses that are run out of repurposed containers, shipping containers. And that at least puts them to use but I gather, there may be thousands of them that have not been repurposed and are kind of stacked in various places and with nothing really to do with them. Is that correct? And to what extent how large is the problem that we're talking about? Marc?

**Marc Levinson** 39:27

There are containers piled up in various places. I think there's been some progress made in dealing with this, but one of the the issues in addressing this for a city such as Newark is that those containers have owners and you can't just go and and collect them and go and melt them down or sell them or something like that. You have to go through a legal process with each container that seems to be abandoned, but it may not; you have to find the owner or post a notice that they're going to try and effectively foreclose on this container. So it takes a while sometimes to deal with this.

**Marc Levinson** 40:07

There is certainly increased use in used containers. But let me be clear about this. There is an ethic which says these days that it's good to recycle containers and turn them into houses and buildings like you're describing in Asbury Park. But what people want for that purpose is gently used containers. They'd like a container that's come over from Asia once or maybe twice, and is still looking pretty nice. But they can say that this is now being recycled. Nobody wants the containers that have been around for 20 years, and have serious dents and leak and have a rotting wood floor inside. Those containers are sitting waiting for somebody to take them and melt them down. And that's a process which was just sometimes kind of complicated.

**John Torpey** 41:00

Interesting. Liang?

**Marc Levinson** 41:03

So that's totally fascinating. And how the container architecture in some way, really, it's using recycled containers with relatively new ones. It's not a topic that I'm very familiar with; I'm learning from Marc. And yeah, maybe we can talk about also, like the outlook on container shipping and shipping in general in the future.

**John Torpey** 41:33

Sure, sure, go ahead.

**Liang Wu** 41:35

When we look at the growth of the container shipping industry, the growth of cargo trade has really slowed down even before the pandemic; after the 2007 to 2008 financial crisis. So there was this argument that shipping will still likely to be around when it could because everyday survival needs, our appetite for consumer goods and for overseas products have very much grown to depend on shipping. So ocean shipping is still very much the most cost effective and efficient means of moving large quantities of materials in. But growing out of this pandemic, the crew change crisis, the Suez Canal casualty, and even the imbalance of trade of containers, so that that is an ongoing issue, too; there was a lack of containers in Asia.

**Liang Wu** 42:33

So the industry is really trying to figure out, as I mentioned before, the new normal. So there were talks about shortening supply chains. In fact, nearshoring, short sea shipping as opposed to deep sea shipping is already growing in some regions. Intra-Asia trade is big, it's gaining a lot of momentum. And there is also a slowdown of the ways to view larger and larger ships, given all the infrastructural choke points, like ports and canals.

**Liang Wu** 43:07

So, overhaul reflections are being made now on waste management, like Mark mentioned earlier, on diversifying supply chain sourcing and distribution to better handle shocks in the future, because, you know, flexibility and adaptability can mean resiliency in the face of future strains on supply chain, climate change and all that.

**Liang Wu** 43:34

So the industry itself, overall, is also very much subjected to international relations; changing international relations and national situations, geopolitical economic uncertainties. We have US and China, the trade tension between them. That has actually caused the migration of some supply chains to, for example, Vietnam. But at the same time, China has also launched this One Belt, One Road initiative to build the 21st Century Maritime Silk Road.

**Liang Wu** 44:05

So there are a lot there's a lot going on and alot reflections to be made. But among all these projects and all these endeavors, there is indeed an increasing reckoning of the importance of the human element, the seafearers among them. And the industry has already been facing recruitment and retainment challenges before the pandemic. There is a shortage of qualified officers, seafearers of higher ranks.

**Liang Wu** 44:34

So that is something that the industry has to pay attention to, even with all these developments going on. So there are both the pessimism and optimism when it comes to the future. But among the maritime conversations and conferences I have joined that there was this common theme that we cannot do business as usual, we got to think about what's next, what the future beholds.

**John Torpey** 44:59

Fascinating. So this is kind of lead in, I think, for Marc, you know what's coming in the future; what's life gonna be like "outside the box"?

**Marc Levinson** 45:10

We've come to think of globalization as involving these long complicated supply chains; these complicated value chains. And what we saw in good part to containerization was that between the late 1980s and 2008, merchandise trade grew at twice the rate of the world economy. But that's because the components were made here and they were sent there for further processing, and they were sent someplace else to be installed into a bigger component, which was sent someplace else to be put into the final product, which was sent someplace else to be sold.

**Marc Levinson** 45:45

And so making anything involved a lot of shipping. We've seen a reversal of this tendency since the financial crisis; that goods trade as the share of the world economy decline rather than growing at twice the rate of the world economy, goods trade has been growing at roughly half the rate of the world economy for the past few years.

**Marc Levinson** 46:08

So we're not seeing globalization go away, we're not seeing an end of shipping, but we are seeing that this is not the leading edge of the world economy anymore and that merchandise trade is becoming less significant. I think what we're going to be seeing, and this is why I titled my book "*Outside the Box: How Globalization Changed from Moving Stuff to Spreading Ideas*", we're seeing a lot of trade and intangibles; from movies, you may be watching while you're at home during the pandemic, to just the routine business that companies do every day when they've got people sitting at computers in different countries sharing information.

**Marc Levinson** 46:52

We have very poor measurement of how much of this sort of trade goes on, but it's becoming an increasingly important part of our economy. And my expectation is that in future years, it will be this sort of digital trade; this trade in ideas and in related services, that becomes more and more important, while trading in goods matters less.

**John Torpey** 47:14

Well. That's fascinating. So that's it for today's episode. We're out of time. But thank you so much to Marc Levinson and Liang Wu for sharing their insights about recent developments in global shipping. Remember to subscribe and rate International Horizons on SoundCloud, Spotify and Apple podcasts.

**John Torpey** 47:35

I want to thank Hristo Voynov for his technical assistance and to acknowledge Duncan Mackay for sharing his song "International Horizons" as the theme music for the show. This is John Torpey, saying thanks for joining us and we look forward to having you with us for the next episode of International Horizons.