



Photo: Nicky Gregson/Waste of the World

Exploring the global geographies of ship recycling

When we think about recycling, typically the first activities that come to mind are washing out bottles and jars, tearing up cardboard and putting these items, together with paper and plastics, into various bins and bags ready for collection. This type of recycling is now commonplace in homes, offices and schools across the UK. But what happens when we think about recycling on a bigger scale? What happens to bigger objects? Things like cars, planes, trains and ships? How are these things recycled, and how is this type of activity positioned in the global economy?

One feature of globalisation is the flow of waste, recyclable materials and second-hand goods from rich to poor and rapidly developing countries. The flow of electronic waste to Africa and China is a case in point,

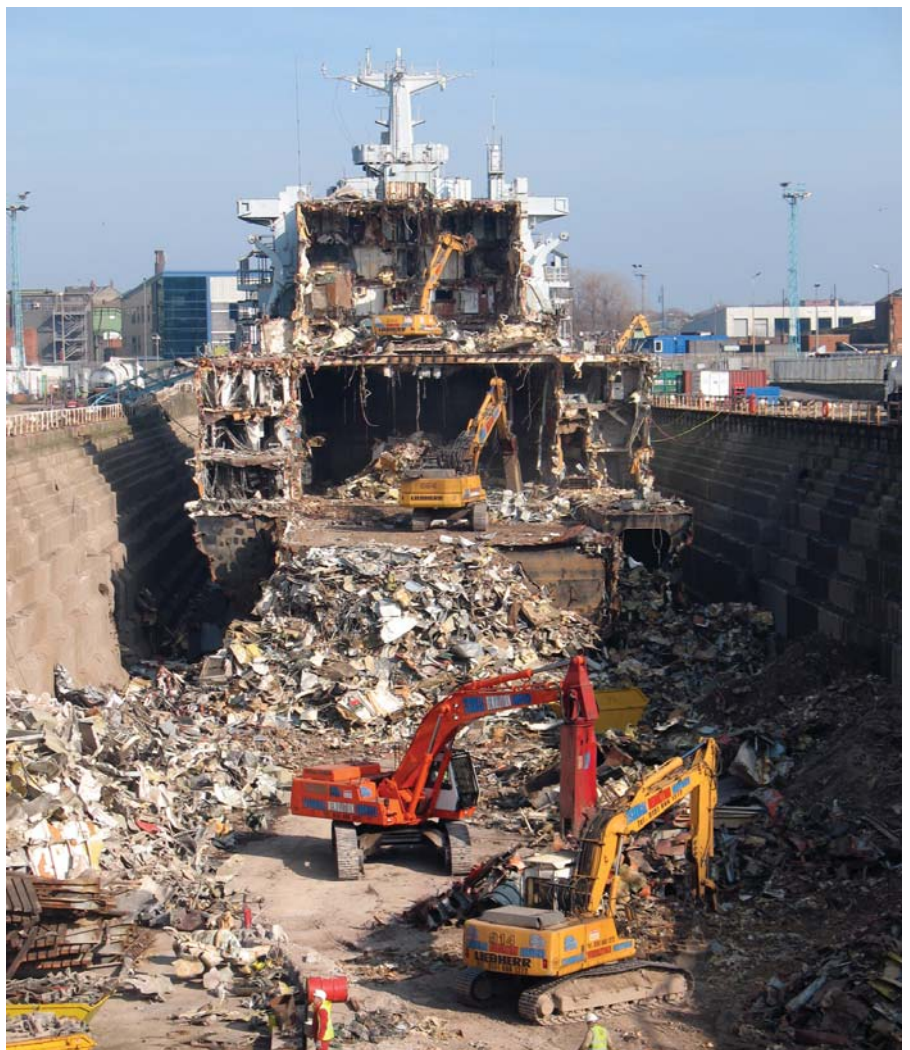


Photo: Helen Watkins/Waste of the World

as is that of textile waste and used clothing to West Africa and India. Ships at the end of their working lives also travel in the same directions. Dubbed the 'workhorses of globalisation', ships typically stay in use for 25–32 years. Afterwards, however, most end up being scrapped on beaches in South Asia: at Alang in India and near Chittagong in Bangladesh.

But why do ships end up in these parts of the world? The simple answer is steel: ships are made up of 97% steel, and countries such as India and Bangladesh can recycle this for use in their construction industries. But in order to access the steel, the ships have to be broken up. This is a dirty, dangerous, labour-intensive and highly polluting process. It is also one that has attracted much negative publicity from NGOs, who are campaigning to end the scrapping of ships on Asian beaches and to see the activity moved back to the developed world. Both the USA and the UK, largely in response to political pressures, have had to reconsider their approach to the disposal of their ex-naval vessels (stories of them being broken up by hundreds of people, including children, using hammers and blow torches on beaches in South Asia, do not make for good headlines). As signatories of the major international agreements on international waste flows, these governments also have responsibilities in ways that businesses do not (although the International Maritime Organisation's Convention on Ship Recycling has attempted to regulate the commercial sector's disposal options towards greener choices). The UK's new ship recycling policy means that all decommissioned naval vessels are now broken up in the UK, Belgium or Turkey. Whereas the UK once led the world in ship building, it is now in the vanguard of attempts to create a successful ship recycling industry in the developed world. An open question is how viable such activities are in the global economy.

Ship recycling is one of six projects in The Waste of the World research programme, funded by the Economic and Social Research Council. As part of this project, Professor Nicky Gregson and Dr Helen Watkins from the University of Sheffield's Department of Geography have worked closely with geography teachers at High Storrs School, Sheffield, and the Sheffield GA Branch to teach KS3 students about industrial-scale recycling. The approach emphasised knowledge exchange, with year 7 and 8 students, their teachers and the research team all working together. Thanks to the generosity of Leavesley International and Technical Demolition Services, the students were able to visit a ship recycling site in the UK to see ship breaking operations at first-hand. They also visited the



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Department of Geography at the University of Sheffield to interview and film some of the former crew of the ship they had seen being broken up. The geography and drama departments at High Storrs School also teamed up to enable the students to stage a performance based on their research. This used drama, dance and documentary and archive film footage and was performed to an audience of over 100, including representatives from the businesses involved, the ex-naval personnel, the researchers and parents.

Another element of the project has seen the university researchers collaborate with Julie Mackenzie (High Storrs School) and Juanita Shepherd (Sheffield GA Branch) to produce a DVD on ship recycling. Aimed at KS3-5 students, it was distributed free to all UK secondary schools in July 2009. The KS3 activity involves a sequencing exercise in which students explore the process of ship breaking and the trajectories of materials. The KS4 and KS5 activities involve decision-making exercises focused on the UK. These enable students to explore the

difficulties of siting this dirty and dangerous industry.

Recycling sounds clean and green; it's something we tend to feel positive about. Turning attention to ship recycling shows that this type of work is not only difficult, dirty and dangerous, but also something that is extremely hard to place in the developed world. This, together with the economics, is why it is an activity that currently primarily occurs on the beaches of South Asia, where labour is cheap and where the costs of waste management are either low or non-existent compared to the developed world. Such are the challenges posed by recycling big, complex things. Both the research and the teaching materials it has produced show that, along with materials and economics, place, industrial legacies and geographical imaginations are all central to emerging new global geographies of recycling.

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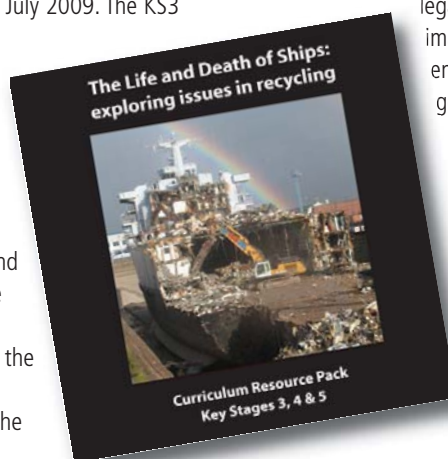


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