GEOGRAPHY SUMMER WORK

How is the UK changing?



Geography is a dynamic subject that considers how places change. Consider the UK, how is it changing and why it is changing?

Think about :

- It's physical geography landscape, climate, weather events, natural environments
- It's human geography population, built environments, industry, employment
- It's political geography local, national, international

Produce a report that describes the changes that are happening in the UK (include specific facts and figures wherever possible) and suggest why it is happening.

Now read the article on the next page and be ready to discuss its relevance to your studies.

This is an article form The Guardian magazine, 21.03.2020. The extract is from a book called 'Foot Work: What Your Shoes Are Doing to the World', by Tansey E Hoskins. It is a good article on the impact of globalisation. Please read it and make notes on any global impacts of the fashion trainer industry – things like environmental and social impacts.

Sneaker Con is an aircraft-hangar-sized convention that smells worse and worse as the day goes on. I am at the London edition of the event, but it's just been in Las Vegas, and is soon due to be in Berlin, than New York. Thousands of sneakerheads have paid £25 entry fee and are browsing merchandise stalls piled high with sneakers. The price tags on these shoes are not for the faint-hearted: £550, £600, £700.

The attendees are approximately 95% male. Of the women here, many are the mothers of young boys. One of the few women not shaperoning a child is Helen. She lives in a rented three-bedroom house on the outskirts of London with her husband, Luke, and his collection of trainers. The shoes have filled up the loft and the spare room. When they began to invade her bedroom, Helen told Luke she needed some space. The couple booked a table at Sneaker Con, where stall was piled with trainers which cumulatively cost tens of thousands of pounds. This expense has become a source of tension. "That's is why he had to stop," Helen tells me. "Some are quick strike releases: we'd be on a night out and have to pull over on the motorway to follow a Twitter link to get a pair of trainers."

Helen says Luke has spent a lot of time investing in "one-off" trainers that are now being re-released and are no longer unique. Luke tells her they're an investment, but unless they can turn a profit, they have been a poor one.

Luke walks up to the stall shrugging his shoulders and frowning. "It's dead for Jordans," he says. "No-one is buying Jordans."

In the global market place, labels have come to mean everything. A shoe that is 'hyped' and worth hundreds of pounds at Sneaker Con one day can become worthless the next. Basing value on symbolism, rather than usability, means it lingers for a brief moment before the shoe needs replacing, fuelling production and an environmental impact.

Branded labels printed or sewn onto the outside of shoes might help to construct an identity for the customer, but they were purposefully blank in terms of where and when the she was made. The factories where the shoes were made often contain hazards: a lack of fire escapes, poor ventilation and toxic chemicals. The people who make them often subsist on shockingly low wages: a family of four homeworkers in Pakistan, for example, may earn as little as 800 Rupees (around £8) per day, while Syrian refugee children as young as six have been found employed as shoemakers in Turkey.

Unwanted trainers are now a certified global product. For Helen and Luke, they have come at the cost of a comfortable home to live in. Scale this up to the 24.2 billion pairs of shoes that World Footwear estimates were manufactured in 2018, and they represent something more: the threat not just to one home, but to the planet.

After they lose their cultural value, what happens to all the shoes we don't want any more? On an industrial estate in north-west London, stands the large warehouse base of Traid, a garment recycling charity. Metal shelves laden with boxes reach far up to the ceiling; colour-coded sacks form mountains many metres high; and rank upon rank of trolleys stuffed with deliveries are lined up. The volume of discarded clothes and shoes is eye-watering. This stuff has been manufactured all over the world, but is being thrown away because it developed a fault, no longer fitted, had fallen out of favour, or was no longer in fashion.

Overseeing collection is recycling development manager Jose Balladron. Originally from Spain, he worked in the marketing department of Zara's parent company, Inditex, before switching sides to join Traid. He explains that as shoe consumption has increased, they have become harder to recycle. "Shoes used to be 11% of all the stock we

collected, 270 – 280 tonnes per year," he says. "Now this has dropped to 6%. The quality has got worse, so people just throw them in the bin."

Rose Nkore, Traid's sorting supervisor, has spent 20 years handling the things that society has thrown away. She has seen the quality of shoes fall, and finds more and more items donated unworn, the label still attached. "We get flooded with lower quality [items]: these go mostly to discount sales."

Clothes and shoes deemed not good enough for charity shops end up on a second belt. "If an item is not good enough for the shops, it goes to the recycling companies who grade them:" says Balladron.

Recycling companies sort rejected donations by style, climate, cultural suitability and quality. Once sorted, items are packed into bales, usually weighting 40 -50 kgs, and are shipped out across Europe, Africa and Asia. It is a market that fluctuates with geopolitics: Ukraine, for example, was a key destination for second hand exports until the conflict with Russia.

Once they have arrived, bales of clothes of shoes are sold wholesale to warehouses, who sell them to local sellers. They typically break the bales down into smaller packages weighing 5 – 10 kg, which are sold to stallholders in markets and villages. At the Owino market in Kampala, Uganda, one of the largest second hand clothing hubs in Africa, there are so many stalls that local safari companies offer visitor tours. The contents of each bundle is a lottery: sometimes a market trader will earn enough money to cover rent and food for the month; sometimes they make nothing.

This deluge of second hand clothing has been partly blamed for the collapse of East Africa's own clothing and shoe factories, which thrived until the 1980s. The leaders of the East African Community (EAC) decided to take action, announcing that they would ban used clothing imports in 2019; but the US government, at the behest of angry recycle clothing exporters, argued that the ban violated previous trade agreements. Some countries in the group, including Kenya, backed away from the ban, so the export of unwanted shoes from the US continues. Rwanda, however, held strong and raised tariffs on used US clothing and footwear. They were suspended from the African Growth and Opportunity Act trade agreement as a result.

Many shoes are deemed unsuitable for these markets. While the public are asked to tie or strap shoes together before donating, pairs are often separated in the collection process. At Traid, separated shoes are placed into boxes until it their turn to be tipped out onto the conveyor belt to be sorted. The jumbled shoes roll up onto the platform. Working quickly, the sorters' hand fly over the piles, spotting shoes by colour and type and matching them back together. This is a lucky run – all the shoes are matched; a single scarlet baby shoe is all that is left on the conveyor belt. "Single shoes break my heart," Rose says. "We know they can't have been donated as singles, but the process means they get separated."

Another obstacle to shoe recycling is the intensification of gang-related crime. Raiding clothing banks is a surprisingly lucrative business: a tonne of good quality clothes can be worth several hundred pounds. Traid say that in their worst months, two or three tonnes per week have been stolen from their clothing banks. These textile banks, often found in supermarket car parks, are solid metal boxes that seem impossible to steal from. Gangs steal the secondhand clothing and take it to their own sorting facilities, hoping to find a haul of high-end items. In 2016,, a pair of shoes implanted with a tracker were placed in a clothing bank that was regularly broken into. The shoes were taken first to a farm in Dagenham, Essex. There they sat in a shipping container for a week before being shipped to Poland, where they ended up in a vintage shop in Krakow.

As well as being angry that people steal from the charities for profit, Baladron is annoyed by the pollution this kind of theft generates: "It really bothers me – the CO2, transport, petrol. A piece that could have been sold a mile from the warehouse has travelled all over the world and maybe if it's not sold in that shop in Krakow, it will end up in Uganda or Senegal. If it's not sold there, it may go to Pakistan."

While organisations such as Traid arertying to stop unwanted shoes going to waste, about 90% of the shoes still end up in landfill. One way to prevent this would be to recycle them. Shahin Rahimifard, professor of sustainable engineering at Loughborough University, is an expansive, generous talker, battler-hardened, yet full of enthusiasm after years of arguing with shoe brands. He started work on the problem of shoe recycling 15 years ago. The first idea his team considered was making new shoes out of old ones. If only one part of the shoe had broken, why not just replace the upper or the sole and create a new pair? But the upcycling idea crumbled, not because of engineering or technology, but because no one bought them.

Assembling new shoes from discarded parts may come to pass one day, but for now fashion renders styles obsolete by the time they reach recycling. Then there are the difficulties of quality control and uniformity, as well as the possibility of passing on any bacteria or lingering viruses – from verrucas, for example. In short, few people want tp buy and wear shoe waste.

The option Rahimifard settled on instead was fragmentation: dismantling a shoe into its component parts, followed by post-fragmentation separation, or splitting the pasts up my material type. This is not easy. "Sometimes we see 10 to 15 different types of material in one shoe, including four different types of plastic," says Rahimifard. "Companies buy insoles and parts of shoes from different companies, and the different companies use different plastics; some manufacturers don't care."

While maximising materials creates a hurdle when it comes to recycling, mixing colours adds similar difficulties, and using metal shanks or decorative studs is a calamity, because it's so difficult to shred. "The way shoes are designed and manufactured at the moment doesn't take into account their end of life," says Rahimifard. "The inclusion of metal components makes recycling much more difficult. We are calling for a ban on the use of metal." Some of the problems brands are creating are deeply worrying. Put a slice of ethylene vinyl acetate, used in the shock-absorbent midsole often found in trainers, into landfill and it will still be there in 1000 years.

The engineering processes Rahimifard is developing will help recycle some of the shoes of the future. His team has turned fragmented parts of shoes into rubber chips, bonded together with resin. The sponginess of the rubber makes it ideal for use as underlay in basketball courts, and as surfacing for athletic tacks. Though becoming an athletic track should never be seen as a shoe's final destination: the track surface will itself eventually become waste and need to be removed, recycled and reused.

Dr Kate Fletcher, professor of sustainability and design at the London College of Fashion, has coached brands on how to reduce their environmental footprint. Her conclusion is that attempts to lessen the impacts of single items are no match for the endless production of stuff: "The efficiency gains of all those small-scale reductions are simply not enough to outweigh the cumulative effect of consumption," she says. What is needed instead is a "switching of the levers", imagining the world in a different way.

Fletcher is so intent on change that she thinks we should fundamentally re-think the way we walk. Sports companies market trainers as protection and enhancement for the body. Part of this message is that footwear must be replaced regularly to maintain protection of the feet: running shoes are marketed as only being supportive for 500 miles. Nike boasted in 2003 that its Mayfly 'race-day' shoe would only last 100kms before it wore out.

Fletcher argues that, rather than offering protection, shoes soften and weaken the body. According to paleoanthropologist Prof Erik Trinkaus, humans started to weak shoes 40,000 years ago because that's when our toes gradually began to lose sturdiness; since then, the modern human foot has become reliant on splinting. "Part of the business model is to force a replacement, partly by requiring people to depend on padding," Fletcher explains. "A simple way to circumvent the buying of new shoes is to walk barefoot: take them off. Or develop the strength in the ligaments, ankles and knees to protect your feet if you're walking without a support structure. Then you don't need to replace them." Companies such as Vivobarefoot offer "minimal soled" shoes as thin as 3mm thick, which it argues, allows greater connection with the physical world.

But convincing people to create less waste by walking differently, or even to buy fewer shoes, is a huge challenge. Cheap production and the dominance of fashion means many shoes, especially the cheapest ones, are not built to last. The manufacture of footwear is often shrouded in mystery, leaving shoppers unable to make truly informed decisions about which shoes will last or which can be repaired.

To counteract this, Fletcher has developed an idea called "the craft of use" – a way of interacting with the things we wear which is not about constantly buying more: replacing consumption with action by developing skills that help us maintain what we have.

This change of mindset involves acknowledging that there is satisfaction to be found within the things we already have. In practical terms it would mean removing materials such as metal which make recycling difficult. It would mean using digital scanning so that every shoe is a bespoke object, made to augment the body. It would mean rigorous production standards and modular design, giving us shoes that are designed to last, with individual elements that can be repaired, at no cost, by shoe companies. It wouldn't have to mean lack of choice: shoe libraries could exist in every community allowing people to access a variety of shoes without the need for ownership. Some existing programmes, like the Leeds Community Clothes Exchange, are a model of how this might work: the exchange offers a token for each good quality item of clothing donated, which can be used to buy clothes others have donated.

While major trainer brands occasionally bring out product lines that are marketed as eco-friendly, these shoes represent a small percentage of their output and a fraction of shoe production as a whole. Nike recently launched a Space Hippie shoe, parts of which are made from factory waste. But one speciality product is no match for the ecological impact of a global brand such as Nike, which produces hundreds of millions of shoes each year. It also begs the questions of why, if brands have the capacity to produce less-harmful shoes, they don't apply planet-friendly methods to everything they do.

Back in his small laboratory, Rahimifard is adamant that brands should invest in solving the problem of shoe waste by financing research. For a global industry with an estimated worth of more than \$200 billion today, this should not be a big ask. One plan being developed in the laboratory is perhaps the most fitting answer to excessive consumerism. Dr Richard Heath, a colleague of Rahimifard's, wants people to eat their shoes. It's not impossible – the German film director Werner Herzog once did it after losing a bet to another director: he took his shoes to a top Californian restaurant, boiled them for five hours, seasoned them generously, and ate one on stage. Heath, meanwhile, has a less theatrical approach: his is investigating whether post-consumer leather could be treated like animal hide and broken down into gelatine and fibres which could then be used as food ingredients. Running shoe jelly anyone?