
ENGLISH LEARNING
FOR CURIOUS MINDS

Episode #256
Where Does All Our Rubbish Go?
22nd Apr, 2022

[00:00:00] Hello, hello hello, and welcome to English Learning for Curious Minds, by Leonardo English.

[00:00:12] The show where you can listen to fascinating stories, and learn weird and wonderful things about the world at the same time as improving your English.

[00:00:22] I'm Alastair Budge, and this episode is going to be released on April 22nd, Earth Day, a day when we think about this wonderful planet we all live on.

[00:00:34] So, the theme of today's episode is going to be rubbish. That's right — rubbish, trash, **junk**[1], waste.

[00:00:43] Specifically, what actually happens to it after the rubbish truck comes to **take it away**[2]?

[00:00:50] OK then, let's talk about rubbish.

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[1] things of no value or use

[2] transfer it to a different location

[00:00:56] One thing that **unites**[3] every human being on Earth is that we are all responsible for some sort of rubbish.

[00:01:05] Whether you are rich or poor, whether you live in the desert, the countryside, or in a big city, we all create some sort of waste.

[00:01:15] Of course, not every country produces the same amount of rubbish.

[00:01:20] On a per-person basis, Iceland actually produces the most waste of any country in the world, at 4.5 kilos per person per day, or 1.6 tonnes a year— that's a small elephant worth of rubbish every year for every man, woman and child living in Iceland.

[00:01:42] The average person in Lesotho, **on the other hand**[4], produces just 110g per day, just 2.4% of what someone in Iceland produces.

[00:01:55] And, in general, **for all the talk about**[5] going green and recycling, the richer a country is, the more waste each person in it produces.

[00:02:07] Indeed, of the 2 billion tonnes of rubbish produced every year, 34 percent is produced by only 16 percent of the world's population.

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[3] brings together

[4] from a different or opposite point of view, on the contrary

[5] despite all that is said

[00:02:19] This might be sad, but it is unsurprising, when you think about the fact that rubbish production throughout history is **correlated**[6] with the development of society.

[00:02:32] As societies develop, they make more, which means there is more to throw away.

[00:02:38] If you were a **caveman**[7], living tens of thousands of years ago, you still produced rubbish but **the odds are**[8] that you didn't worry too much about it.

[00:02:49] You might produce some "food waste" from the bits of animals that you cannot eat or turn into tools, but that was about it.

[00:02:59] Rubbish **disposal**[9] likely consisted of throwing a piece of animal bones outside your cave and you wouldn't think twice about it.

[00:03:09] Perhaps it would be eaten by a nearby wolf or fox, or it would simply **decay**[10].

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[6] having the same relationship or connection to each other

[7] a prehistoric man who lived in caves

[8] it is likely

[9] the act of throwing something of no use away

[10] rot, decompose

[00:03:16] You knew not to leave the **decaying**[11] **corpse**[12] of a deer right outside your cave, because it would smell horrible and attract **unwanted**[13] visitors, but that was probably the **extent**[14] of how much you needed to worry about **disposing**[15] of rubbish.

[00:03:34] But over thousands of years, as we humans figured out how to produce more and more, and we started living together in increasingly urban environments, the amount of waste we produced, and the nature of that waste started to look quite different.

[00:03:53] And you might be thinking that this was **purely**[16] a modern, post-Industrial problem, but it's certainly not.

[00:04:02] The first ever people to **dump**[17] rubbish into large holes dug in the ground were in Knossos, in Crete, back in 3,000 B.C. Once the rubbish **pits**[18] were full, they were

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[11] rotting, decomposing

[12] dead body

[13] not wanted

[14] amount

[15] throwing something of no use away

[16] only

[17] get rid of, drop

[18] large holes dug in the ground

covered up[19] with earth to protect them from attracting **vermin**[20] and producing foul smells.

[00:04:23] Later, in around 500 B.C, the leaders of Athens in Greece started to **dispose**[21] of rubbish at least one mile away from the city so invaders couldn't use **piles**[22] of rubbish to **climb over**[23] the city walls.

[00:04:39] And you probably know that Rome has 7 hills, but you might not know that there's another one in southern Rome called Monte Testaccio, which is thought to contain up to 50 million broken olive oil **amphorae**[24], the **clay**[25] containers used to hold olive oil in Roman times.

[00:05:03] So, the problem of what to do with rubbish is really as old as civilisation, or at least **urbanisation**[26] itself.

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[19] filled

[20] small harmful animals or insects

[21] throw it away, get rid of

[22] quantities put on top of each other

[23] go up and over

[24] containers used to hold olive oil in Roman times

[25] dried earth used for making bricks and pottery

[26] the process of city growth

[00:05:13] And throughout history, including the present day, there have really been four **broad**[27] categories of things you can do to rubbish, to anything that you no longer need.

[00:05:26] It can be **buried**[28] in the ground, so that it either **decomposes**[29] over time or simply remains there, **hidden**[30] from view.

[00:05:35] It can be put into rivers and ultimately **washed out**[31] to sea.

[00:05:40] It can be burned, **incinerated**[32], so that it literally no longer exists.

[00:05:46] Or it can be reused for another purpose - whether that's recycled, repaired, or in the case of food or human waste, used as **fertiliser**[33], to grow new **crops**[34].

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[27] general

[28] put (in the ground)

[29] rots, breaks down

[30] not easy to see or find

[31] led or driven by water

[32] burnt

[33] substances added to earth to make plants grow well

[34] plants grown by people in large amounts

[00:06:00] So, to try to answer the question of "where does all of our rubbish go", let's take a look at what a typical person might throw away on a typical day, and see where modern rubbish **ends up**[35] in this categorisation of four different final destinations.

[00:06:20] Of course, there is no typical person, what you throw away is different from what I throw away, and every country **deals with**[36] its rubbish slightly differently.

[00:06:32] But, **for the sake of**[37] this exercise, let's take the example of the average person in the UK, let's even give him a name, Frank.

[00:06:42] Over the course of a day, Frank throws away a little over 1 kilo of rubbish.

[00:06:50] About a quarter of that is food, and the rest **breaks down**[38] into things like plastics, paper, glass, **tins**[39] and electronics.

[00:07:00] Frank is a good, **law-abiding**[40] citizen, and he has separate rubbish **bins**[41] for his mixed waste, his food waste, and his recycling.

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[35] finally is or arrives

[36] takes action about, arranges

[37] for the purpose of

[38] is separated

[39] types of containers

[40] behaving according to the laws, obedient and lawful

[41] containers for waste or rubbish

[00:07:10] He puts everything into the right **bin**[42], takes it out to the side of the road on the **appropriate**[43] day, the rubbish truck comes along and that's the last Frank thinks about his rubbish.

[00:07:24] But what actually happens?

[00:07:27] Well, Frank's mixed waste, his general rubbish, is probably taken either to a **landfill**[44] or it's **incinerated**, it's burned.

[00:07:37] Things haven't really changed all that much since Knossos in ancient Crete, and around a quarter of all the waste produced in the UK is simply **buried** in the ground.

[00:07:50] Sure, **landfills**[45] have become more regulated, and they are typically **lined**[46] to stop **hazardous**[47] liquids getting out and entering the ground, but the general concept is pretty simple: there's a big hole that's dug into the ground, rubbish is put in there and when it's full, the entire thing is closed so we don't have to see it any more.

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[42] container for waste or rubbish

[43] right, suitable

[44] an area where rubbish or waste is put in the ground

[45] areas where rubbish or waste is put in the ground

[46] placed, positioned

[47] dangerous

[00:08:15] There's a phrase in English which is "out of sight, out of mind", meaning if you can't see something you don't think about it, and there is probably no more appropriate use for it than our **attitude**[48] towards burying rubbish in **landfills**.

[00:08:33] Another potential destination for this mixed waste is the **incinerator**[49], where it is burned and turned into electricity.

[00:08:43] In the UK it's a relatively small amount, around 5%, but in places such as Norway, Sweden, and Denmark up to 50% of all rubbish is **incinerated**.

[00:08:57] Now, there's an interesting debate on the pros and cons of **incineration**[50], of burning rubbish, instead of sending it to **landfill**.

[00:09:08] **Proponents**[51] of **incineration**, of burning, say that it's actually better for the environment, because it produces energy and **eliminates**[52] or at least reduces the carbon emissions that would have come from transporting the rubbish to a **landfill**.

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[48] behaviour or thinking

[49] a device for burning things that are of no use

[50] burning

[51] supporters

[52] completely stops

[00:09:26] The actual **incineration** process is now advanced, safe, and **harmful**[53] **fumes**[54] are typically caught before they are released into the atmosphere.

[00:09:37] Plus, leaving rubbish in a **landfill** often causes **methane**[55] to be released, and **incineration** fixes this because **methane** isn't released.

[00:09:48] But **incineration** is, of course, not an ideal solution - it requires large expensive **plants**[56], can cause air pollution, and if people think that they don't have to care about their rubbish because it will simply be burned and **turned back into**[57] useful electricity then they will stop caring about using less in the first place, and reusing or recycling their waste.

[00:10:15] And this brings us very nicely on to our next point, the big green **bin** that Frank has in his house with a recycling symbol.

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[53] dangerous, damaging

[54] dangerous gases

[55] a type of gas with no smell or colour

[56] machines

[57] be used again for

[00:10:26] Frank might think of himself as an **environmentally conscious**[58] person. He reuses plastic bags, perhaps he says no to plastic **straws**[59] in restaurants, he tries to cycle everywhere and he drinks water from the **tap**[60].

[00:10:42] But he likes yoghurt for his breakfast, he gets a copy of the newspaper delivered every morning, he likes **tinned**[61] baked beans on toast [he is British after all], and he enjoys the occasional bottle of wine.

[00:10:57] No problem, Frank thinks, plastic, paper, **tins**, cans, and glass, it all gets recycled anyway.

[00:11:06] So, Frank throws the yoghurt pot, the newspaper, the **tins** and the glass all into the recycling **bin**. Perhaps there are different recycling **bins**, but it's always a bit confusing to Frank. Does he need to take the **lid**[62] off the yoghurt pot? And what about if there's a metal **cap**[63] on the glass wine bottle - does he take that out and put it in with the **tin**[64]?

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[58] showing that he cares about the environment

[59] thin hollow tubes for drinking from a glass or bottle

[60] a device by which water from a pipe can be controlled, a faucet

[61] kept or preserved in a metal container or can

[62] cover

[63] protective cover or top

[64] metal container, can

[00:11:33] Frank does his best, and at the end of the day it's all **taken away**[65] when the rubbish collectors arrive.

[00:11:39] But what happens to his recycling?

[00:11:43] Well, before we get into exactly where Frank's recycling goes, let me add that recycling is actually nothing new.

[00:11:51] People have been recycling in some way or another for millennia; in fact, evidence **dating back**[66] to the Chinese Bronze Age — roughly 2000 B.C. — shows that the Chinese were already recycling metal.

[00:12:08] This wasn't out of any great care for the environment - it simply made sense.

[00:12:14] It was cheaper to re-use than to **make from scratch**[67].

[00:12:19] And until it became cheaper to make products from **scratch**[68] than to re-use them, recycling and reuse was the **norm**[69].

[00:12:28] In the 19th century, one of the main ways people recycled was via someone called the 'rag-and-bone-man' — a man who would go door-to-door and collect

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[65] transferred to a different location

[66] belonging (to an earlier time)

[67] make from the beginning, without using anything that already existed

[68] the beginning

[69] expected thing to do

rubbish, especially metal, **cloth**[70], and bone, to sell to merchants who would reuse these materials.

[00:12:48] During World War II, materials like **nylon**[71] and **tin** cans were collected and recycled into things like bombs and **ammunition**[72].

[00:12:59] But as the cost of production of goods continued to decrease, there was less and less of an **incentive**[73] to reuse and recycle.

[00:13:09] And at the same time, developed countries produced more and more.

[00:13:15] With the 1950s and 1960s came the arrival of "**throwaway**[74] culture", with companies advertising **single-use**[75] knives and forks to be used at home, so that there was no **washing up**[76] to be done.

[00:13:29] And this brings us to where we are today, with Frank and his recycling **bin**.

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[70] woven material or fabric made from wool, cotton etc.

[71] a synthetic or artificial fabric

[72] objects that can be shot from a weapon, bullets

[73] reason to do something

[74] relating to the practice of throwing away a product after using it only for a short time

[75] intended or planned to be used once and then thrown away

[76] cleaning

[00:13:35] Frank might think that his recycling all goes off to a nice **plant**[77] nearby and it's all reused and turned into more yoghurt pots, more newspapers, baked bean **tins** and bottles for his favourite Shiraz, but if he really followed his recycling he would likely be disappointed.

[00:13:56] In the UK there is a large **incentive** for recycling to be sent abroad, to be exported. Once it is exported, it's meant to be recycled, but there are very few checks on what actually happens to it.

[00:14:12] And the UK isn't really an **exception**[78] here.

[00:14:16] Indeed, if we are talking about Frank's yoghurt pot, and plastics in general, it's estimated that only 14% of all plastic waste is actually recycled. About 14% of it is burnt, 40% goes into a **landfill** and the remainder, a third of all plastic waste, pollutes the environment, going into rivers, and ultimately being **washed into**[79] the sea.

[00:14:46] Why, you might ask, are we so bad at actually recycling plastic?

[00:14:51] Well, countries like the UK tend to adopt a **mentality**[80] of "out of sight, out of mind".

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[77] a place where industrial process takes place

[78] something that does not behave in the same way as others

[79] driven or led by water into

[80] way of thinking

[00:14:59] Recycling is sent abroad in **vast**[81] containers. The rubbish to be recycled is weighed, and the country **gives itself a pat on the back**[82] because it has "recycled" a certain amount of waste.

[00:15:13] The problem is that a lot of this rubbish to be recycled is almost completely **unusable**[83]. There was an excellent documentary from 2018 called Dirty Business that **exposed**[84] exactly how this worked, and it contained shocking **footage**[85] of huge piles of waste that had been set aside for recycling lying in places like Hong Kong, Malaysia and even Poland.

[00:15:42] So Frank, and perhaps even you and me, might think that we are **doing our bit**[86] for the environment, but the reality is that in many cases the final destination for that yoghurt pot is not to be **turned into**[87] a water bottle but to sit in a field in Malaysia or to **bob around**[88] in the Pacific Ocean.

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[81] extremely big

[82] thinks it has done well

[83] of no use, not able to be used

[84] made it known, revealed

[85] recorded video

[86] doing what we can to help or contribute

[87] changed into

[88] moving up and down with no specific destination

[00:16:06] So what is Frank to do, and is there any light at the end of this particular tunnel?

[00:16:13] Well, environmental groups would tell Frank to consume less, and to reuse and repair whenever he can.

[00:16:22] Frank can also take some comfort in the knowledge that, although yes we might still put rubbish in **landfills** similar to the ancient Greeks, technology is improving and helping us get better at managing rubbish.

[00:16:37] In particular, when it comes to Frank's favourite subject, recycling, technological improvements mean that it is easier than ever to separate waste, to separate Frank's bottle tops from the glass or to separate the plastic from the **cardboard**[89], so that an increasing amount of whatever is put in the recycling **bin** actually gets recycled.

[00:17:01] So, to end on a slightly optimistic note, sure there has never been a point in human history where so much rubbish has been produced by so many people.

[00:17:13] To be precise, there's over 2 billion tonnes of rubbish produced every year worldwide, and even in the countries that typically don't produce much rubbish now, rubbish production per capita is increasing.

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[89] thick brown paper usually used for making boxes

[00:17:29] But never before in human history has there been a better system in place for actually **dealing with**[90] it.

[00:17:36] Yes, it is far from perfect, and there are many many holes, **flaws**[91], and **misaligned**[92] **incentives**[93], but this is no reason to give up all hope, and certainly no reason for Frank to give up his **beloved**[94] **tinned** baked beans.

[00:17:54] OK then, that is it for today's episode on where all of our rubbish goes. I hope it's been an interesting and **thought-provoking**[95] one, and that you've learnt something new.

[00:18:06] As always, I would love to know what you thought of this episode.

[00:18:09] Do you know much about where rubbish is sent in your country?

[00:18:13] Is it a subject that you had ever spent much time thinking about, or is it someone else's problem once it's thrown in the **bin**?

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[90] taking action about it

[91] weaknesses, mistakes

[92] having a wrong direction

[93] reasons to do something

[94] very much loved

[95] making you think

[00:18:21] How do you think people should be **encouraged**[96] to consume less, or should we put more of a focus on dealing with our rubbish appropriately?

[00:18:30] Or is it a **delicate**[97] balance between the two?

[00:18:33] I would love to know.

[00:18:35] You can head right into our community forum, which is at community.leonardoenglish.com, and get chatting away to other curious minds.

[00:18:43] You've been listening to English Learning for Curious Minds, by Leonardo English.

[00:18:48] I'm Alastair Budge, you stay safe, and I'll catch you in the next episode.

[END OF EPISODE]

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[96] persuaded, influenced or made to

[97] fine, needing careful attention to keep or maintain

Key vocabulary

Word	Definition
Junk	things of no value or use
Take it away	transfer it to a different location
Unites	brings together
On the other hand	from a different or opposite point of view, on the contrary
For all the talk about	despite all that is said
Correlated	having the same relationship or connection to each other
Caveman	a prehistoric man who lived in caves
The odds are	it is likely
Disposal	the act of throwing something of no use away
Decay	rot, decompose
Decaying	rotting, decomposing
Corpse	dead body

Unwanted	not wanted
Extent	amount
Disposing	throwing something of no use away
Purely	only
Dump	get rid of, drop
Pits	large holes dug in the ground
Covered up	filled
Vermin	small harmful animals or insects
Dispose	throw it away, get rid of
Piles	quantities put on top of each other
Climb over	go up and over
Amphorae	containers used to hold olive oil in Roman times
Clay	dried earth used for making bricks and pottery
Urbanisation	the process of city growth
Broad	general

Buried	put (in the ground)
Decomposes	rots, breaks down
Hidden	not easy to see or find
Washed out	led or driven by water
Incinerated	burnt
Fertiliser	substances added to earth to make plants grow well
Crops	plants grown by people in large amounts
Ends up	finally is or arrives
Deals with	takes action about, arranges
For the sake of	for the purpose of
Breaks down	is separated
Tins	types of containers
Law-abiding	behaving according to the laws, obedient and lawful
Bins	containers for waste or rubbish
Bin	container for waste or rubbish

Appropriate	right, suitable
Landfill	an area where rubbish or waste is put in the ground
Landfills	areas where rubbish or waste is put in the ground
Lined	placed, positioned
Hazardous	dangerous
Attitude	behaviour or thinking
Incinerator	a device for burning things that are of no use
Incineration	burning
Proponents	supporters
Eliminates	completely stops
Harmful	dangerous, damaging
Fumes	dangerous gases
Methane	a type of gas with no smell or colour
Plants	machines
Turned back into	be used again for

Environmentally conscious	showing that he cares about the environment
Straws	thin hollow tubes for drinking from a glass or bottle
Tap	a device by which water from a pipe can be controlled, a faucet
Tinned	kept or preserved in a metal container or can
Lid	cover
Cap	protective cover or top
Tin	metal container, can
Taken away	transferred to a different location
Dating back	belonging (to an earlier time)
Make from scratch	make from the beginning, without using anything that already existed
Scratch	the beginning
Norm	expected thing to do
Cloth	woven material or fabric made from wool, cotton etc.
Nylon	a synthetic or artificial fabric
Ammunition	objects that can be shot from a weapon, bullets

Incentive	reason to do something
Throwaway	relating to the practice of throwing away a product after using it only for a short time
Single-use	intended or planned to be used once and then thrown away
Washing up	cleaning
Plant	a place where industrial process takes place
Exception	something that does not behave in the same way as others
Washed into	driven or led by water into
Mentality	way of thinking
Vast	extremely big
Gives itself a pat on the back	thinks it has done well
Unusable	of no use, not able to be used
Exposed	made it known, revealed
Footage	recorded video
Doing our bit	doing what we can to help or contribute

Turned into	changed into
Bob around	moving up and down with no specific destination
Cardboard	thick brown paper usually used for making boxes
Dealing with	taking action about it
Flaws	weaknesses, mistakes
Misaligned	having a wrong direction
Incentives	reasons to do something
Beloved	very much loved
Thought-provoking	making you think
Encouraged	persuaded, influenced or made to
Delicate	fine, needing careful attention to keep or maintain

We'd love to get your feedback on this episode.

What did you like? What could we do better?

What did you struggle to understand?

Let us know in the forum community.leonardoenglish.com

