

FUTURE SCAPES

THE LAST LADYBIRD

by Kate Harrison



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FUTURE SCAPES



WHAT DO YOU THINK LIFE WILL BE LIKE IN 2025?

FutureScapes is an exciting collaboration project that aims to explore the potential of technology and entertainment to create a better, more enjoyable world in 2025. It's not about predicting the future so much as imagining the possibilities. There is by definition an infinite number of possible futures ahead of us. But one thing is clear: the world of 2025 will be very different from the one we live in today.

By starting with life in 2025, rather than today, FutureScapes aims to stimulate more creative thinking about how technology might help us live sustainably. By sharing immersive and entertaining stimulus material – such as short stories – this collaboration aims to invite the contributions of 'futures' experts and an eclectic mix of thinkers, writers, designers and the public to address the opportunities and challenges of life in 2025 and the potential roles technology will play in it.

FutureScapes is designed to be as open and collaborative as possible and is being convened by leading sustainability non-profit organisation, Forum for the Future, and leading consumer technology company, Sony.

To find out more or to get involved visit www.sony.co.uk/futurescapes or follow us on Twitter @better_futures and #futurescapes.

THE LAST LADYBIRD

by Kate Harrison



Kate Harrison has worked as a producer, director and developer across an array of TV programmes including Panorama and Newsround. She now writes full-time, and lives by the sea in Brighton.

‘Good morning, Freya – and happy fourteenth birthday!’

I cover my head with a pillow. I know what my Diary Presenter is going to say before she says it. Apart from changing my age, her script’s been identical for the last five years.

‘Of course, May twenty-seventh isn’t just your birthday. It’s also Ladybird Day, which marks the sad day that entomologists declared Britain’s last species of ladybird officially extinct.’

Diary smiles sadly. And it is sad, of course. But it’s quite hard to get upset about the loss of a creature I’ve only ever seen as holos or in storybooks. Same with honey bees. I can’t believe there really was an insect that built hives, made honey and used to do the job of all the world’s professional pollinators.

Diary clicks her fingers, and dozens of ladybird holos dance in front of my eyes, actual size. Their wings move so fast that the different markings – spots and stripes, hieroglyphics – blur into a mist of red, black and yellow.

‘The ladybird was named after the Virgin Mary, as the insect’s spots were thought to symbolise seven sorrows and seven joys.

‘But sorrows were to dominate the fate of Britain’s forty-three different species of ladybird, after an invasion by more aggressive harlequins deprived smaller ladybirds of their food. Then an experiment in biological control through predator wasps only hastened the decline of all ladybirds, including the harlequin itself. So, Freya, our thought for today is everything has consequences.’

Dad swears those particular consequences had nothing to do with him, even though I know his department, the Ministry of Eco-diversity, only exists because everyone’s terrified about the rise in extinction rates.

‘Happy Ladybird Day, Freya!’ Diary chirrups, her software not clever enough to tell her that her cheesy grin looks all wrong after the extinction info-burst. ‘Looking like a fine day for your Vitamin D top-up, a relatively mild twenty-seven Celsius. Recommended sunscreen level: thirty-one. Suggested outfit: red sundress, in honour of the ladybird.’

I reach into the wardrobe and pull out what Dad calls my black sack. Shouldn't we be mourning Ladybird Day, not celebrating it?

Mum's holo replaces Diary's; she's working Sunday again. 'Happy birthday, Freya darling. Don't forget, lunch at two.'
'Where are we going?'
'It wouldn't be a surprise if I told you that, would it?'

She blows me a kiss, before Diary pops up again and tells me I have four hundred and twelve birthday greetings from friends in sixty-two nations. Plus a hyper-priority email about my options for Responsibility Year. I don't open it. I don't want to think about that on my birthday.

As soon as my parents get back from work, we take a rickshaw down to the surprise venue. Which turns out to be . . . Crystal. Wow! All the A-listers come here.

Dad sees my face. 'Got a bit of a bonus this year.' I won't tell Lily that. My best friend is a bit obsessed with Dad's job; she'll only start speculating about what evil experiments he'll have had to do for his bonus.

Inside, I wish I'd taken Diary's advice and dressed less grungily. Goosebumps appear on my arms – because it's gorgeous, but it's also freezing. I guess that's the point of a restaurant made of ice! As we wait to be seated, Dad spots the Eco-diversity minister sitting with his wife in a raised booth, and waves at them. When the waiter finally comes, he shows us to a table at the back. I reach out to touch the frozen wall. I wonder how they keep it from melting, in this heat.

'No need for menus,' Dad tells the waiter. 'The hot and cold tasting menu, please. And champagne. 2011 vintage, if you have it. Good year for wine and for baby daughters.'

The waiter's too cool to smile. He's holding out a tray. Then Dad remembers. 'Ah. I'd forgotten. Crystal's offline. So the celebs don't get papped.' He gives his LifeDevice to the waiter, and Mum and I do the same. Without it, I feel naked. The LiDe does pretty much everything for me now, except breathe: my whole life's on there, from the pocket money in my Treasury, to my school grades and the back-ups of every email I've ever sent, every picture I've ever taken.

The waiter comes back with the champagne. He must notice how nervous I am, because he winks at me. 'Don't worry, your LiDe's now on charge in its own fireproof safe. We take more care of the LiDes than we do of our VIPs.'

I look round, because Lily will want to know if anyone famous is here. But we're in the ordinary people's section. Engagements, retirements, Responsibility Year parties. You need a big excuse to afford Crystal.

' . . . to our daughter,' Dad is saying. Mum puts a drop of champagne in a glass for me, and we toast, and the flowery smell makes me nauseous.



The waiter's back already, with our first course. 'Asparagus and goat milk soup, frosted berries and damson mistral,' he announces. The soup is the prettiest pale green.

Iced blackcurrants float on top, like full stops, and just above the surface, there's a fine haze of dark purple.

It's too pretty to eat. When I try, it tastes of nothing. Everything tastes of nothing, though I pretend I'm loving Dad's big treat. 'Native farmhouse cheese with nettle candyfloss and wild leaves,' the waiter deadpans. The candyfloss is on top, a green-black nest of weirdness. The cheeses look like Babybels. But the leaves are the first appealing thing I've seen all night. They look real.

I move the cheese and floss to the side. The first lacy leaf almost disintegrates on the prongs of my fork. When I taste it, it's bitter but mouth-watering. 'Have mine,' my mother says. 'I need a coffee.'

She tips her pile of leaves onto my plate. I hear something hard drop onto the porcelain. Grit? Mum hasn't noticed, she's too busy trying to get the waiter's attention. As I move the leaves aside, I catch a flash of something red. Is this a present from Mum and Dad? A charm for my vintage silver bracelet, maybe?

Then it moves . . .

Only a tiny bit, but it makes me jump. I peer at the plate. The thing is more orangey-red than scarlet. And it's freckled with black spots. It looks like a . . .

No. It's Diary's silly talk, putting ideas in my head. Or the drop of champagne. The thing is crawling. Like a . . .

I stare at it. Perhaps it's just a mutant beetle. Or a foreign invader, like the harlequin was. It seems to be staring at its surroundings with its compound eyes. What the hell does it make of Crystal?

'Finished, Freya?' Mum asks. Then she whispers, 'Shall I order pizza when I get my LiDe back? I'm still starving.'

The waiter approaches, impatient to clear our table for the next customers. I grip the plate. No! Even if it is some freak beetle, I can't let it be thrown away. Got to act fast.

I cover the creature with the remaining leaves, then take my napkin and flop it across my plate, lifting the greenery as gently as I possibly can. Then I open my big messenger bag – I was right to go grungy, after all – and slip the napkin inside.

I private message Lily as soon as I'm home.
'Hey, Frey. Where did you go for lunch?'
'Crystal. But that's not—'
'Wow! No wonder you look flushed.'

Who did you see there?
'It's not who. It's what.'

I take the folded napkin from my bag, and hold it between the 3D triangulation sensors. I hesitate. What if it's empty – or I've squashed or scared the poor thing to death?

I let the stiff fabric fall open. Lily leans into her webcam. 'Hold on, you know our connection's iffy.' She squints, then gasps. 'No way! Is that . . .'

Somehow, the creature looks even brighter here, against the soft whites and greys of my bedroom.

'I know it looks like one, Lily. But it can't be, can it? They're extinct.'
'Is it dead? Where did you find it? What do your parents say?'
I answer in order. 'No. In a gourmet wild salad leaf. I haven't shown them.'
'How can you be sure it's not dead?'
I hold it closer. Blow incredibly gently. The antennae move. 'Did you see that?'
'Frey, that's amazing. Have you done an ID?'
'I thought I'd get you online so we could do it together,' I tell her.
'Great, let's—' then she shakes her head. 'No. We mustn't. They'll know. If it is what we think it is, they'll come for you. For it.'
'But if it is a . . .' I realise I haven't even said the word yet. Perhaps I'm as paranoid as Lily. 'Well, we can't keep it a secret. There might be more. They might not be extinct after all.'

Lily's thinking. I go on instinct, she's the clever one. 'Let's not do anything till we've made sure. There's an underground internet place Dad used to use. Unmonitored.'
'And if we confirm it?'

'Look, Frey. The last generation didn't care enough to keep them alive. If we let the world know this time, it'll end up a freak show. The place where the salad came from will be over-run. Gawpers, bounty hunters. Every rich kid will want their own. Do you really wanna be responsible for that?'

I look down at the tiny beetle in my hand. For the first time, I notice white hairs all over its wings. They make it look even more vulnerable. 'So what do we do?'
'How many leaves have you got?'
I count. 'Four.'
'I reckon that's enough to keep even the greediest beetle fed till we think of something. I'll meet you outside the entrance to Park 12C.'

I daren't risk leaving the insect behind, so I empty a couple of rings out of a satin-lined box, poke holes in the lid with nail scissors, and then place the creature inside. It takes a few steps then settles in one of the curved edges of the heart shape. It seems to be making itself at home.

The café's in a dark basement flat behind the station. It rumbles as we jam ourselves into a booth housing a retro computer that doesn't have triangulation, or even a webcam.

'Safer that way,' Lily explains. She knows more about the risks than anyone. 'Do you want to see? Before we go online?'

I take the lid off and she stares at him for a long, long while.

'He's amazing, isn't he?' I say.
'He?'

I shrug. 'He just seems like a he. Have you seen the hairs all over his back?'
'We should give him a name,' Lily says.
'You don't give beetles names. Not unless you're four years old.'
'Not for sentimental reasons. For safety. Like . . . a codename. If we say the L word, someone might hear us.'
'Spot?' I suggest.
'Don't be disrespectful, Frey. Something dignified. He could be important.'
'Noah,' I suggest and when she smiles at me, I know it's just right.

It takes two clicks to confirm it – Noah is a *subcoccinella 24-punctata*. A twenty-four spot ladybird. Found – until extinction – in grassland and meadows. The only vegetarian species of ladybird.

'Is that why he's survived?' Lily says. 'Because the harlequins prefer meat.'
'Meat? Aphids aren't meat!' I giggle but I know what she means. 'It says they live for a maximum of two years. So there must be others for him to have bred with.'
Lily pales. 'If they haven't dug up all the leaves for Crystal's customers.'

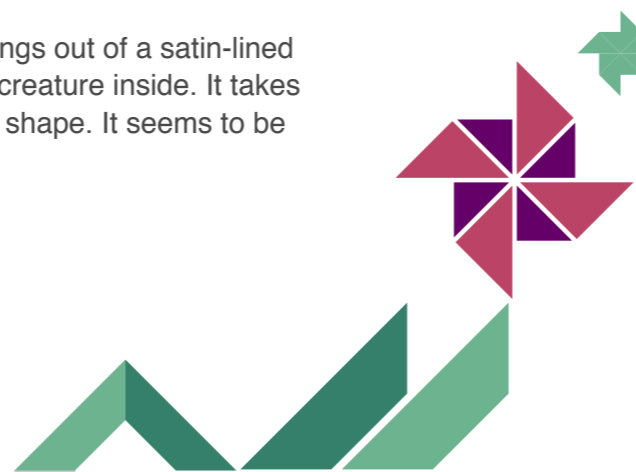
I shudder. Most of those leaves went uneaten. Have the last ladybirds on earth had their habitat destroyed for the sake of a cheese course?
'We could go through the bins. Look for where they got the salad from? Or at least try to salvage a few,' Lily suggests.

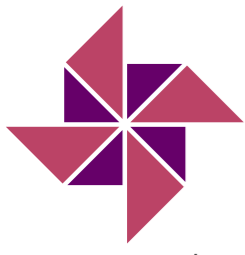
I shake my head. 'It's secure, Lily. The Prime Minister eats there. We won't get anywhere near.'

My jewellery box sits on the table in front of us. I've never felt responsibility like this before. 'Maybe we should go public. Otherwise, what hope does he have?'

'Not yet,' Lily replies. 'The stakes are too high.'

I can't sleep. Every five minutes, I use my LiDe's light to check Noah's OK. I'm desperate to go social. There'll be biologists online right now who know how to care for a . . . Noah. But I guess it'd be like asking for advice on harvesting honey from your





bee colony or trimming the horn on your unicorn. The best that's going to happen is that our duty GP will be diagnosing Responsibility Year stress, and prescribing me pills for my delusions.

And the worst . . .

I check him again. Why isn't he trying to fly away? His wings haven't moved once, and maybe it's my imagination, but they seem duller, tonight.

'What do you want me to do, Noah?' I whisper. I'm not silly enough to expect him to answer me back. But I really wish he could.

'Good morning, Freya! It's a fantastic spring Monday out there, with a cooling breeze. Don't forget your sports kit. I notice you haven't yet opened your email about your Responsibility Year. Is there a reason for this?'
'Too busy on my birthday,' I call back from my bed.

Diary takes a split second to process my answer and call up the appropriate response. 'Don't forget you only have four weeks to reply, or you'll be given a random allocation!'

Forget? Not very likely.

I put her on Standby as I dress, then tuck Noah's box into my schoolbag. Outside, I can't feel the breeze Diary was on about, only the heat. I try not to make sudden moves, so Noah doesn't have a bumpy ride.

'All well in Noah's ark?' Lily asks, as we swipe in for Independent Monitored Learning. 'He's fine. I didn't sleep a wink.'

We head for the old part of the library, where they keep a few books for posterity. No one ever comes here except parents when they're being shown round. I open the lid. 'At least he's been eating.'
'How can you tell?' I point to a tiny mark I scored on the leaf with my fingernail. 'When we left, he was here. Now he's here. He's munched right through, see?'
'What about when he runs out of food, Frey?'

I don't know how to answer that. The air con's whirring like crazy, so the forecaster must have been lying. Lily says they do it to stop us panicking. She frowns. 'That box is the earth in microcosm. We're forced to consume the planet we depend on for our survival.'

I hate it when she starts talking like her dad. It sounds fake, plus if the teachers hear, she's toast.

'I've had one idea,' she whispers. 'Kew Gardens, right? What if we went there, and stole as many different leaves as possible? There's bound to be one he likes.'

'Lily. Everyone knows Kew is guarded like the Bank of England since the bio thefts.'
'I guess.' She reaches into her pocket and hands me something. Leaves.

'Where did you get these?'
'Park,' she says.
'Jeez, if you'd been caught.'
She shrugs. 'Worth it.'

I hide all the leaves in my bag except one. It's glossier than the salad, and smells acidic. 'Noah might not like these. They might even poison him.' But I guess we have to try. I rip the tiniest piece off, and put it into the jewellery box.

'Are you girls working, or gossiping?' A Facilitator pokes her head round the partition. 'You haven't even got your LiDes out yet. I've got my eye on you two. Especially you, Lily Barker.' We reach for our LiDes. When I touch the screen, my fingers leave a trail of sap on the glass. Dad's working from home, because of the heat.

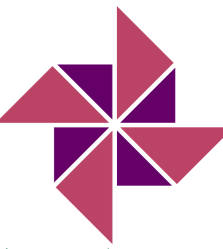
'OK, Ladybird?'
'Not bad, Dad.'

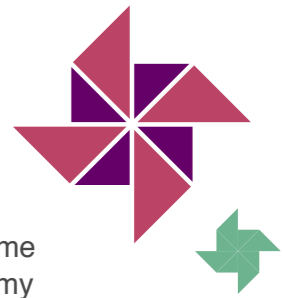
Maybe I can talk to him. It's hard to believe he could do the things Lily says. Maybe his department has learned from the wasp mistake. Perhaps they do have the expertise to make Noah's habitat safe, re-populate it.

Everyone else at school avoids Lily, since her dad posted one too many conspiracy theories and was put into protection. Her mum's got no money, so they live in this weird noughties time warp, with a house full of furniture and books and ornaments, and a dodgy old broadband router. Mum makes me shower as soon as I get home from there because of the risk of book mites.

Dad's looking at me. 'Something's up, isn't it Freya? Is it your RY options?'
I sit down. 'Kind of.'
'We won't push you into Water Patrol. It's just . . . we think it might be your only chance of a Travel Permit. Plus, we don't want you to opt for Pollination just because Lily has to. It's boring, back-breaking work.'
But it keeps you at home, of course. And safe.
'You can pick up where you left off with Lily when you get back.' 'Yeah.'

Except we both know it won't happen. RY changes people, the way uni did when Mum and Dad went. You take the risks and the heat, because it's an adventure. 'As for the danger,' Dad continues, 'well, some of the aquifers can get a bit hairy, but we know you're sensible. Plus, with my contacts, you won't be on the front line.' I frown. Dad notices. 'It might not be fair but you're my only daughter, Freya.' Yes, Dad can fix anything. I'm so tempted to tell him about Noah. But Lily's voice in my head tells me no. Maybe this is too big even for Dad to control.





Cheetah Day comes and goes. As does Mountain Gorilla. And Leatherback Turtle. And Noah keeps munching through Crystal's finest – though he ignores the stolen leaves. I've been back to Lily's internet joint every afternoon when school's out, trying to find underground groups who might help, posting on forums under false names. Lily doesn't know I'm doing that – if I get caught, at least she won't have to lie. Though if I am found out, I know it could bring trouble for Dad as well as me.

It scares me. But whenever I look inside the box, I know I'm doing the right thing. Twice I almost go social, to tell the world. Appeal for help. But I'm scared for Noah - and for myself. It happens after dinner on the fourth night.

I open the box as usual, and stare at Noah, waiting for him to react to the light. But then I spot something on the silk underneath. Something yellow. And the smell . . . it's like something's died.

'No!'

I private message Lily. 'It's Noah . . . he's stopped moving. And there's yellow stuff. It must be blood. Lily, I think I've killed him.'

The monitors will have picked up on blood and killed, even though this is meant to be a private chat. But I don't care. Lily starts to cry. I've never seen my best friend cry.

'What do I do?'

She scrubs her eyes with her fists. 'I think . . . you should go social now. To explain to people what they've lost. It's not like they can hurt Noah anymore.'
'Won't people hate me for letting him die?'

She doesn't answer.

I write notes. Cross them out. I can't find the words to explain. It's not just hard-liners like Lily's dad who get torched. There was a girl at school who had to relocate, all because she said the wrong thing about some other kids' favourite band. Noah needed me. Why couldn't I protect him? Perhaps I deserve all I'm going to get.

I browse the channels to choose where to go social. Environment? No, I'll be a lamb to the slaughter there. Confessions? No, there are lurkers there, hoping for something juicy. Loss and Bereavement. I select it with a wave. A few of my friends tune in straight away, and start firing off messages. What's happened, Freya? R U OK? It's not your folks? I select Broad-Xast.

'I . . . no, we have all lost something today,' I begin. 'Something that matters. I know I'm going to get flamed for this, but I have to tell you what I found.'

I pick up the box, the lid still on, and I hold it up to the triang. The view counter shows more people are adding my stream to their feed: a couple of dozen now.

'I found something that they told us didn't exist anymore. A ladybird.' It's the first time I've said the word. I squeeze off the lid, and hold the box up to the camera, using my other hand to make the sensors zoom in close. On my own display, his 'blood' is a violent sunshine yellow. The acrid smell has grown stronger.

'I tried to take care of him. He meant something. Something like . . . hope, I guess. If there's one of him, there must be others. But then where are they?'

Four hundred. Two thousand. The counter spins faster. Ten thousand people watching me now. 'I didn't kill him. But maybe I didn't do enough to save him, either. Then again, did you, when ladybirds were on the verge of extinction the first time round?'

I put the box on my chair, and leave the triang focused on Noah. As I back out of shot, the numbers are still going up. Fifty-five thousand people worldwide are watching a dead ladybird in his heart-shaped coffin.

Killer!
SCUM!
Fraud?

The flaming's begun, too. The citizens of the world are doing their worst.

'You don't understand,' I shout. 'I was trying to protect him.'

People are launching polls: hoax or real? Should Ladybird Girl be arrested, jailed, buried in an airless box herself?

'It wasn't airless,' I cry out, though the camera's still focused on Noah. 'What would you all have done instead? Taken him to the authorities, to be experimented on, or turned into a freak show?'

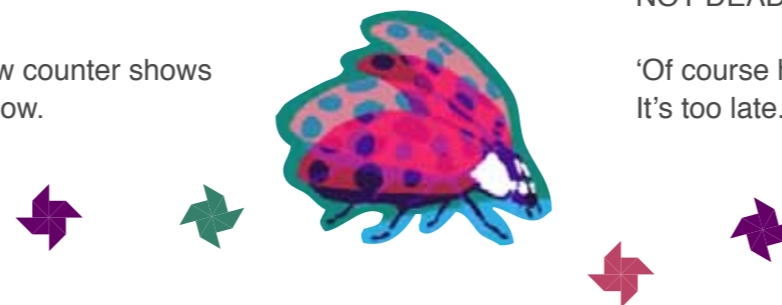
MURDERER!

I step back in front of the triang. 'The way you're all acting, I'm glad I never went social before. Is this what humans do, tear each other apart? We're like wild animals . . . No. Worse than wild animals. Most animals don't attack for the sake of entertainment.'

As I watch, more people arrive, rewinding my words, then live-streaming. Something's changing . . .

Coulda been any of uz!
Give the girl a break shes cut up
He might not be dead
NOT DEAD

'Of course he's dead. That's ladybird blood. If you were here, you'd smell him too. It's too late.'



I tilt the box towards the triang. 'Look. What else could he be but . . .' And then Noah moves.

Twenty-five minutes later, our apartment intercom is buzzing.

'Freya?' Mum hammers on my door. 'I don't know what the hell's going on, but there are journalists downstairs who want to see you. Google. The BBC. What have you done?'

I push my chair up against the door. I'm transfixed by Noah. And I'm not the only one. Seven million people, give or take the odd hundred thousand, are following Noah's progress across his final leaf.

Go Noah!
Veggies will inherit the earth
Ladybugs rule
It's ladyBIRDS, dummy
Not if you're in Region One, US of A

I thought Noah had been resurrected. But it turns out he didn't die the first time. Biologists in Korea, Bengal, Uzbekistan have all been Broad-Xasting about the ladybird trick of reflex bleeding. Noah thought he was under threat, so he played dead and excreted noxious yellow blood to fool predators until he thought the danger had passed. Except it won't be noxious enough to see off the scientists or the media.

More hammering on the door. 'Freya, Dad's on the LiDe. He's coming over, with a Quarantine Team. What have you been doing? I bet it's an infestation of book mites from Lily's house, isn't it? You never listen.'

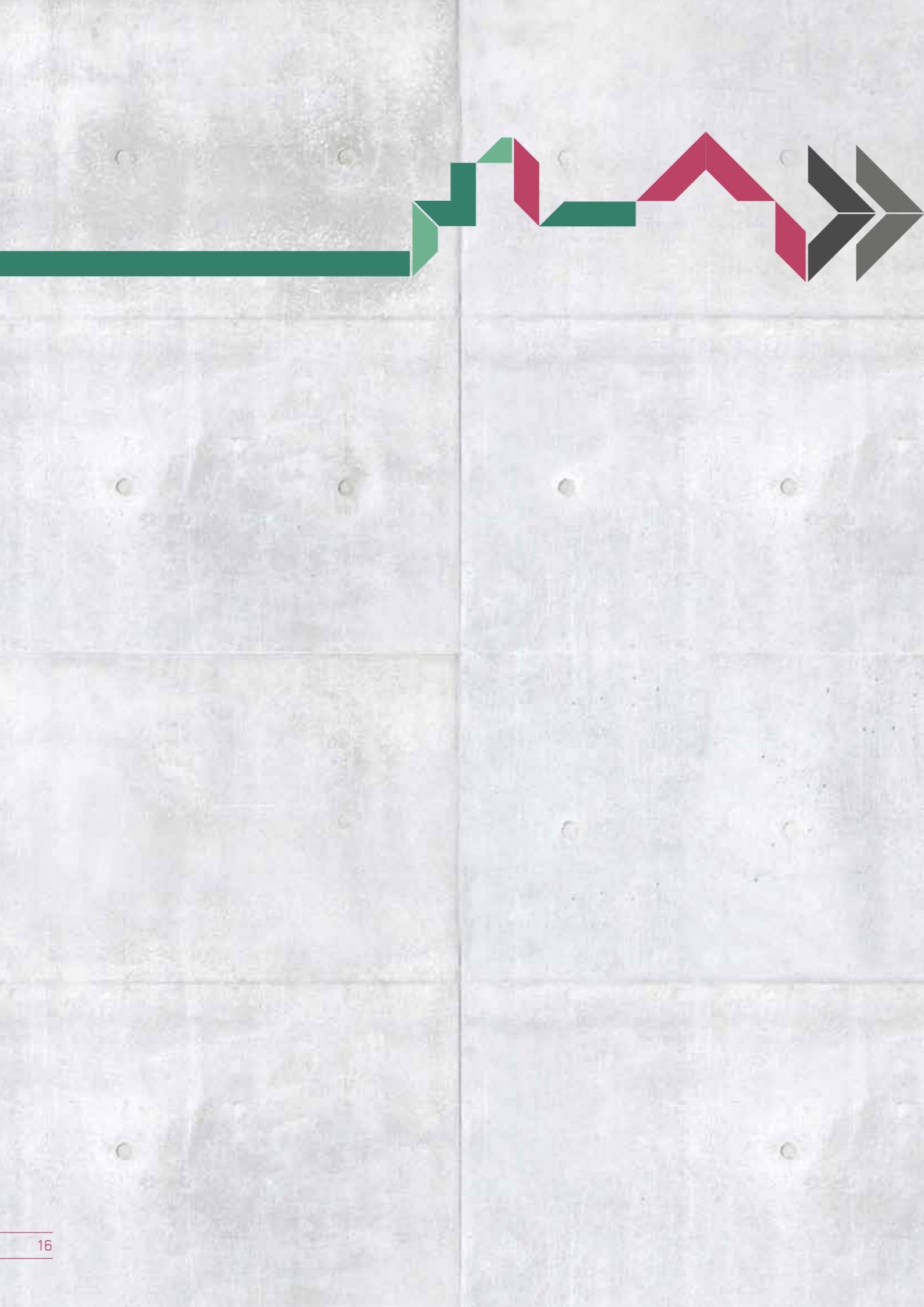
Two million people hear the anxiety in my mum's voice. I step into triang range. 'They're coming, world. They want him. So what do I do – open the window, give him the chance to fly away?'

Mum calls out, 'Freya, your dad says if you don't let them in, you'll be breaking the law.'

The world is typing.
Shame!
FREYA AND NOAH, STAY STRONG
We are still here – we are the witnesses

The flamers have been drowned out – instead, tiny faces crowd onto my stream, supporting us in a hundred different languages. Lily's one of the faces, her cheeks wet with tears. I hear sirens outside. But the voices are louder. Lily was wrong about people. And then I know. It's going to be OK. There are too many of us who believe: the believers won't let anything bad happen to me or Noah. He may not be the last of the ladybirds. But he could be the start of something good.





About Sony

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Sony recognise that our businesses have a direct and indirect impact on the societies in which we operate and we see sustainability as a critical part of our company ethos and activities. Our partnerships with NGOs such as WWF, UNICEF and Save the Children ensure we play our part as a responsible global company. Our "Road to Zero" global environmental plan sets out a long-term goal of achieving a zero environmental footprint (through curbing climate change, resource conservation, control of chemical substances and biodiversity) throughout the life cycle of our products and business activities by 2050, as well as specific mid-term targets in line with that goal.

Sony believes that technology can make a positive contribution to tackling social and environmental issues, both today and in 2025. We have a strong track record in open innovation for sustainability with our Forest Guard and Open Planet Ideas initiatives.

Sony's role in FutureScapes is to use our brand's reach and our expertise in technology, imagination and innovation to engage the widest possible audience in an open collaboration to help everyone better understand – and innovate for – an uncertain future.

To find out more about our corporate sustainability activities, visit: www.sony.co.uk/eco

About Forum for the Future

Forum for the Future is a non-profit organisation working globally with business and government to create a sustainable future. We have 15 years' experience inspiring new thinking, building creative partnerships and developing practical innovations to change our world. Our aim is to transform the critical systems that we all depend on, such as food, energy and finance, to make them fit for the challenges of the 21st century.

Forum works with more than 100 partners across business and the public sector. We specialise in a 'system innovation' approach to sustainability and use powerful tools such as 'futures', innovation and sustainable business model development to help companies succeed. We communicate and share our thinking and tools widely, including running a Masters course for future leaders and publishing the leading magazine on environmental solutions and sustainable futures, Green Futures.

Forum for the Future's role in FutureScapes is to design and deliver the futures process and provide sustainability expertise.

www.forumforthefuture.org

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