

LETTER FROM THE TEAM



Dear Readers,

Worldbuilding Magazine is excited to present our ninth issue to you, the worldbuilding community. This marks the second issue of Volume 2, and our second year as a publication. Food is our theme this time around, and as always we have plenty of quality articles, stories, prompts, and art for your enjoyment.

One of our favorite parts of this magazine is the community submissions. We started as a community-run magazine and we don't intend to change that. In this issue we're showcasing Illogical_Blox's world: "Genysis", a unique inversion of the "receding magic" trope. Our doors are open wide to community submissions, prompt responses, and art features, so please be sure to send us submissions at http://www.worldbuildingmonthly.com/contact/, or on our Discord server!

We have also begun implementing some changes in order to improve the Worldbuilding Magazine experience. Going forward you'll notice all content has been given tags in order to help you find what you're looking for quickly. Of course, we recommend reading the whole magazine, but if you're interested in a specific aspect of worldbuilding these tags can help you find relevant content at a glance. Additionally, we are excited to see the return of an Ask Us Anything section—something we haven't featured since our second issue. To get it rolling again we will be asking for questions from you this issue. If you have a question about worldbuilding, the magazine, or anything you'd like to learn from the staff send us a message and it might be answered in an upcoming issue!

We've always strived to be a fun and educational part of the worldbuilding community, and we're happy to have made several friends here! <u>WorldAnvil</u> has been an excellent partner, as have <u>Mythcreants</u>, <u>Mythic Scribes</u>, <u>GM Forge</u>, <u>Nerdolopedia</u>, and the various content creators we work with to create a diverse and entertaining magazine.

Feel free to get in contact with us on our <u>Twitter</u>, <u>Facebook</u>, <u>Instagram</u>, or come and chat with us on <u>Discord</u>. Subscribe to future issues on our website, where all our past issues can be found as well. And as always, happy worldbuilding!

Sincerely, the Worldbuilding Magazine Team.

Throughout this issue of Worldbuilding magazine you will discover recipes from a few of the worlds the staff have created. Deep Fried Ice Worms constitute only the tip of the iceberg—wait until you hear about the berry cakes and the Ribeni Vine Fry!

Deep Fried Ice Worms by LordHenry7898

Deep fried ice worms are a popular street food on Europa in the 28th century. To make them you take 5 or 6 of the foremarm-sized worms, grind them into worm arm-sized worms, grind them into worm mush, and make little balls out of them. Then you deep fry the balls; there's really nothing to it. Some vendors add spices which are basically salt, that being what which are basically salt, that being what passes for spices on Europa. They either do this or mix in chunks of other critters found in Europa's oceans into the meat for flavor.

4	WORLD SHOWCASE: ILLOGICAL_BLOX'S GENYSIS Interview Conducted by Adam Bassett
8	FEATURED ARTIST: CABA111'S THE SHELL Curated by Wynter
14	THE PURPOSE OF PLACES Amador Laput
15	INTRODUCTION TO AGRICULTURE Hexarch
18	"THE GREAT GETABOUT RACE" Debug200
24	HOW LONG SHOULD BREAD DOUGH RISE? Strongly OP latypus
26	"THE ART OF GLASS" Strongly OP latypus
32	EATING HABITS & SOCIAL IMPACTS Adam Bassett
34	"INCIDENT REPORT" M. E. White
40	PROMPTS: WORLDBUILDING & WRITING Various Authors

Bokai

RESOURCES ON FOOD Cover and Logo: Tristen Fekete

WORLD SHOWCASE: ILLOGICAL_BLOX'S GENYSIS

Interview

Dystopia

Interview Conducted by Adam Bassett

Illogical_Blox, also known as Endo, and I spoke about Genysis, a project that's been in the works for a bit over one year. Blox's vision is of our own Earth after a cataclysmic event has ushered magic back into the world, causing a massive amount of destruction and changing people's way of life forever.

This month's world showcase will look deeper into Blox's Earth, and the people who survived the devastating return of magic. When I asked him about the overarching idea of his world, this is what he had to say about it:

The idea behind **Genysis** (name may be subject to change) is that magic returned to Earth disastrously, causing the apocalypse and the end of modern civilization. I was tired of reading modern fantasy where magic was leaving the world, so I decided to reverse that trope. It's also set 20 years after the apocalypse (also called **The Return**) because I wanted to write about people rebuilding rather than scrabbling through the ruins to survive. It also allows for a new generation who have no memory of the world before to have grown up. Most of the world's population is dead so large sections of the world have been abandoned, and in those areas where people still live they have banded together into new societies as magic begins to take hold in the ruins of old society.

Interesting. What exactly happened in this apocalypse? How did magic return?

No one is quite sure what exactly the magic is or how it returned—there are some who think that their deity/deities sent it as a punishment or even reward, some who think that it isn't magic at all, but a new kind of force, and many other different thoughts about it. It returned after five years of strife in the world, at an intentionally unspecified date, when a huge rainbow appeared in the sky for

The Uniting Kingdom is the name of present-day United Kingdom, which broke apart and is in the process of reuniting.

three days. It was directly over everyone, no matter where they were, and glowed brightly enough to be seen at night. Around noon on the third day it suddenly shattered and magic returned, explosively.

Huge numbers of people were killed as magic rampaged through the world. Enormous storms, tsunamis, tornadoes, earthquakes, volcanoes, and all kinds of natural disasters ravaged the globe more powerfully than ever before, and in places where they shouldn't have been able to happen. As this was happening bizarre diseases spread and many people were killed seemingly without cause. Consequently war broke out as nations launched desperate last-minute nuclear attacks against their old foes, whom they blamed for what happened. After a year civilization had completely collapsed, and the vast majority of the world's population was dead. Even more died simply due to starvation, disease, or thirst as the survivors fought over the ruins.

Many have renounced their religious beliefs, either because they feel like their gods don't care or because the magic has changed what they previously thought they knew so well. But many others have in turn become religious due to the new and apparently supernatural force. In many places faith has helped communities band together and survive, and of course new religions have appeared.

Many don't understand what the Return means and it is a very hotly contested theological issue. In the Uniting Kingdom*, for instance, Father John has risen to effectively become the new leader of Protestantism in the country, claiming that The Return was the second Fall of Man from the Garden of Eden (our modern society). He believes that, until the return of Christ, human history is destined to be cyclical, in the same way that the Israelites in the Old Testament repeatedly earned God's wrath and repented. Many religious people have become more militant in response to anarchy in the world, defending themselves and others from bandits and those who would take advantage of them.

So who is left?

The human population around the world has been reduced to less than 500 million, so less than 1/15 of our current population. Those who survived were tough and/or lucky. North America and Britain have decent populations, as do India and China, but some places, like most of Eastern Europe, are very sparsely populated. The apocalypse didn't hit everywhere equally.

Those who have survived are in three groups of society, the most advanced being the "Civvies" who have rebuilt or made their own civilization such as the Oilers, who live around the ruins of Detroit and Chicago. They often have stocks of pre-Return goods, have relatively advanced technological progress, and sometimes even have electricity.

"**Prims**", short for "primitives," have reverted back to a tribal society to survive. They are usually nomads, sometimes herders, sometimes hunter-gatherers. They have less advanced technology, naturally, but tend to be quite successful in surviving. A lot of the Canadian survivors, for instance, became prims.



Black Earth Nation member in battle dress, with a rare gun, by Marko Djurdjevic

Then there are the "**Ferals**" who are largely abandoned children who grew up without other humans. By and large they are animalistic, or are survivors who went crazy from isolation and end up attacking anyone who comes close. They tend to exist in uninhabited regions.

How do these three groups interact? Is there a conflict between them or can they work together?

In that case it usually depends on the different groups—the Pan-Africans, for example, work with any prims that they come across and hope to integrate them into their society peacefully, but the Oilers are in constant war with the Canadian prims that they border. However, in general, civvies and prims don't interact that much. Civvies tend to live in the ruins of urban areas while the prims live out in wilderness, but if they do interact it tends to be standoffish and uncomfortable. While many prims would love to raid for food and supplies the civvies tend to be quite well fortified and some still have stocks of guns and ammunition, or are even capable of making their own.

Ferals tend to interact only to fight anyone who comes across them, otherwise they are left alone. Some are feral and don't understand that they are human, and some are incredibly paranoid and somewhat unable to interact from twenty years of isolation and will just kill anyone who comes near.

Could you give us a more detailed example of something that's going on? Maybe a particularly impactful discovery/conflict.

The Oilers are a mercenary group that evolved into a nation. They hoard machinery and are capable of producing their own guns and gunpowder, which makes them as close to a superpower as there is in the new world. However, their attempted expansion into Canada has led to a long and brutal guerrilla war against the Black Earth Nation, a powerful prim tribe who fear that the Oilers mean to colonise and force them out of their territory. Since the Black Earth Nation farms in the summer and hunt and gather in the winter they need substantial land. The Oilers mean to wrest the ruins of the Canadian cities from them, which would both remove their local civvie allies and their access to pre-Return plunder (mainly steel and other metals).

To the south the Oilers are also being pressured by the Rolling People. Magic hasn't done much yet but it has animated two crawler-transporters, old NASA vehicles the size of buildings, which are moving independently without the need for fuel. On their backs ride the elite of the Rolling People, one of the most brutal societies around. They are commanded by Furious George and Black Beauty, who lead their people on raids into the territory of heathens across the US. For example, they destroyed Deseret, a successful Mormon civilization, and mean to kill all others who do not follow their religion; be it by the end of a spear held by a shaven-headed and screaming warrior, or under the huge tank treads of their crawlergods, which break through any defensive wall with ease.

The Oilers want to capture the crawlergods for study, so naturally the Rolling People despise them beyond any other foe.

So magic has animated these machines and given rise to what sounds like a whole new religion. How else has it impacted the world?

At the moment, not by much. The only humans really impacted by it are the oilfingers, who are born sweating machine grease from their hands. They are supernaturally gifted mechanics who can keep machinery and electronics running with ease. As ever there are those who claim they can see the future or use magic, but only a few have discovered ways of *actually* tapping into magic. Most of those who can are fortune tellers, but even then all that's happened is that they are right *more often*. Other than that there are the Drifters, who live on floating chunks of land that were hurled into the sky by the Return and ride the winds. However, they are rare.

So, at the moment, the world is very low fantasy and the collapse of civilization has had far greater effects. However, over the centuries, it does actually change into a true high fantasy world as humans evolve into different species via magical enhancement and magic users begin to harness the new force.

So you have a vision of what this place is like that far in the future?

Yes. It was intended to be a reversal of the idea that "once, magic was strong, but now it is dying", so what it would end up like in the future was somewhat of an obvious decision.

I feel it important, considering this issue's theme, to ask you about the food people have available or make in Genysis.

Well, by and large, people are eating simple food that they have to grow, hunt, or forage themselves. There is a lot of what medieval peasants ate—porridges, soups, stews, and the like—made out of foods that most people wouldn't eat in the modern era like dandelion roots. Honestly though, food isn't much different from the world as we know it now and its history. Some people still eat the canned and preserved foods found in ruins, not as a main meal because there isn't enough, but as a delicacy. Some have matured or fermented quite pleasantly in a sealed environment.

As for drinking, a lot of people drink booze. Alcohol is in great demand among the older generations. A lot of people have managed to move on past the fact that they'll never have the modern world again, many others haven't.

What's your favorite aspect of this newly magical Earth?

Well, my favourite thing is actually something small. I originally had some characters with names like "Furious George", "Fireface", and the like very Mad Max-esque, over-the-top, ridiculous names. Well, since my post-apocalypse is meant to be a more grounded one I decided to eliminate them. Then I realised something. The survivors would have seen post-apocalyptic media with names like that, and more importantly, most people are unrecorded now, which means that you can call yourself whatever you want, and if you are tough enough no one will question it. So, Furious George got his name back as he is both the sort of person to call himself that and very dangerous. Similarly there is a King Henry IX, of the Ashbridge dynasty—his real name is literally Joe Smith, but no one knows that now. So there are many people with different names, be they obvious nicknames or not, and no one can really say if they are fake or not.

This reminds me of Tazerface from Guardians of the Galaxy Vol. 2. I love it.

I'd like to ask about your inspirations when creating this. Is there any particular book, game, movie, etc. that inspired you?

Yes, in fact. The Rolling People are inspired quite obviously by the War Boys from Mad Max: Fury

Road (both shave their heads, tattoo themselves, worship machines, etc.) although the Rolling People have equality of men and women. Furious George is an attempt to write a more realistic Mad Max villain—he is very dangerous, very much insane, and goes into a berserker rage in combat due to some drugs he takes, but outside of combat he is a broken man. He has attempted suicide several times, the only thing keeping him going is a strange dream involving his crawlergods that has made him somehow even more of a fanatic (he actually founded the society).

You'd said something about reading books about magic leaving the society, would you say those were any inspiration at all?

Not really because they tended to focus on a society that had had magic, and one wouldn't exist for centuries in my world. Post-apocalyptic books were more interesting to me, like World War Z and the Zombie Survival Guide, which made me love more grounded and realistic apocalyptic survival as well as helped me think past the scavenging for food stage. Another good one was... hmm, I can't remember the book unfortunately. It revolved around a plague that turned effectively everyone over 18 into a zombie, and was the first apocalyptic book that I read that took place in the UK. There aren't any zombies in my world, but zombie fiction is a big inspiration.

Interesting. Is there anything we haven't discussed (or discussed enough) that you would like to share?

The Drifters were actually the first part of the world—I suddenly had a vision one day of a man sitting on a floating island, dangling his legs over the side, fishing in a lake, and the rest solidified from there. A lot of the more obvious magic got pruned from my world, but they survived. They are rarely found, nomadic people, and usually disliked by those below. This is partly due to the fact that they are romanticised by many surface people, and as a result male Drifters tend to have a bastard, or two. However, this is also due to the fact that they are very proud that they ride the sky, and often refer to those below as "mudcrawlers" or similar. They live in their own communities, normally composed of just one island housing two or three Drifters in the sky, occasionally chancing upon other Drifters.



So as a society the nomadic Drifters view themselves as morally above others? How many in a Drifter community usually?

Not so much morally as physically and just innately superior due to the fact that they live in the atmosphere, not rooting around on the ground. Typically an island will contain two or three people, though there are bigger islands which contain more, and that forms as much of a community as they have. They will sometimes run into other islands, and sometimes a few of them will temporarily band up, but they have a wanderlust that leads to each island going wherever it will independently.

I want to ask what your endgame is. At what point do you think you'll have a look at what you've been working on and say to yourself "I've done what I set out to do"?

Hmm, that's a hard one. I don't think I'll ever really be finished, not when I have the entire world to write about. I've got much of North America and Europe nailed down, but Asia is still barely developed, Africa is underdeveloped, and so on. I write short stories and one day I might write novels, but I think I'll keep on working for a long time yet.

SHELL

HE RING

Hotrock

Thin Garden

N O R I N S U L A

nd Point

NOBODY'S FAULT

 \mathcal{B}

A

C

R

P

A

 \mathcal{S}

A N O A N O D A

Memory Pools

ART FEATURE: CABA111'S THE SHELL

Art

Feature

Science Fiction (Soft)

Curated by Wynter

Hi, I'm caba111! You might know me from the vignettes, usually involving lizards, that I post on reddit and tumblr. I officially joined the world-building community about a year ago, but I've always loved creative writing and fantasy maps.

To date I've worked on exactly two world-building projects; the first was a webcomic called Outsider's Sky. Although I eventually abandoned working on Outsider's Sky it was a lot of fun, and I'm happy with what I accomplished! It was my first real worldbuilding project and helped me develop a lot of the ideas that I've been using in my second setting.

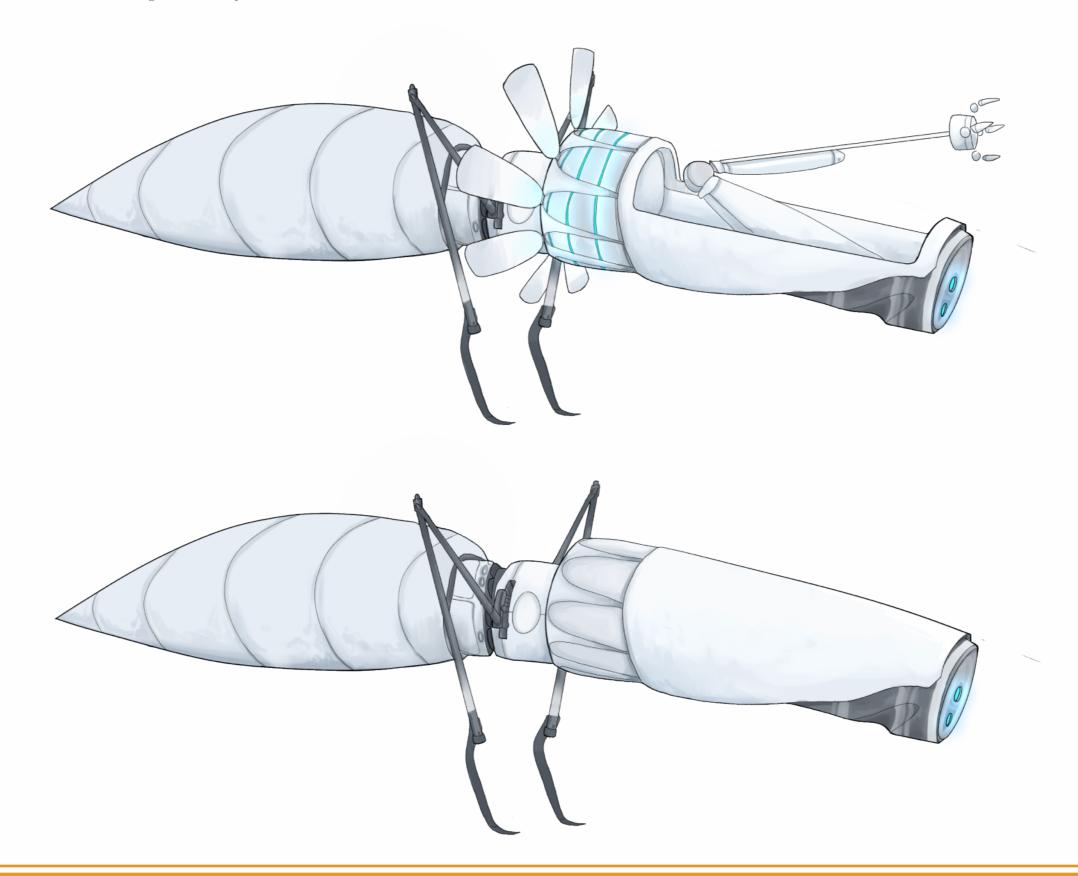
The Shell borrows a lot from Outsider's Sky but is a more refined and cohesive take on those ideas. The Shell is a world that's been abandoned by its creators, where AIs do their best to keep ancient infrastructure in working order as it all starts to fall apart. The Shell's primary inhabitants are the Lizards, which are probably what I'm best known for.

In general, The Shell is borne out of my love for ancient ruins, abandoned structures, and all things deep and mysterious. I've always liked the "precursors" trope, so everything I do is kind of an extension of that idea. I pull inspiration from a huge number of sources; from Studio Ghibli films to the work of others in the world building community.

I'm not exactly sure what I want to do with The Shell. It's probably going to end up as a comic, or maybe a platforming game if I can figure out how to do that. I don't have any long-term goals; everything is still very much in the planning stage. That said, I really enjoy worldbuilding. Whether or not a comic or video game coalesces I don't see myself stopping any time soon.

See More:

- <u>Tumblr</u>
- <u>Deviantart</u>











THE PURPOSE OF PLACES

Plot & Structure

Theory & Analysis

Tabletop Gaming

Amador Laput

That is the difference between the innocuous and the iconic? Every story that has ever been worth telling has had a moment when tension, emotion, and meaning combined. If it is a novel, we can picture the scene with a heightened clarity - remembering for weeks after the book is put away. If it is a movie the moment is replayed in viewers' minds over and over, long after they have left the theater. Luke Skywalker and Darth Vader dueling in Cloud City. The slow realization of the Red Wedding. The life-sized chess game in Harry Potter. These moments are easily identified in other people's stories. They live within us and in turn they inspire our own stories. Why then, when it comes time to emulate these moments on the tabletop, is it so easy for the attempt to come out half-baked? The answer is surprisingly simple: amateurism, carelessness. Consider the purpose of places. This story could be anywhere, so why here? Tabletop games are unique in that the storyteller does not have full control over the direction of the story, but how does one make the most of the moments they do control?

Imagine an everyday game session. The adventurers trek leisurely along a country road. Suddenly, arrows fly through the air and pierce the broadside of the travel-wagon: A goblin ambush! This scene is fairly common for fantasy RPGs. It is even the opening combat encounter of the Dungeons and Dragons Fifth Edition Starter Set. This fight could take place at any table, but how do you change the game so that it could only happen at *your* table?

Great writing is about leveraging every detail to enhance the story. Utilizing setting is no different. The most iconic scenes in film and literature all present settings that reflect the journey of the characters. Consider the first Star Wars movie. When Luke Skywalker decides to take the hero's quest into his own hand and rescue the princess he quickly finds himself inside a trash compactor. Waist deep in sewer water, the walls literally

close in around him. When the Dianoga pulls Luke underwater the audience begins to fear the worst: Luke is—literally—in over his head. This particular scene reflects Luke's journey as a protagonist. The macro scale is also important to consider. In HBO's television series Westworld the guests are invited to indulge their darkest desires in a world populated with lifelike androids. There is no better place to reflect this idea than a recreation of the American Wild West, a place outside of law and moral order. In Harry Potter, J.K. Rowling stages the greatest act of love in the series: Lily sacrificing herself for her son, over the child's crib. In each of these examples from film, television, and literature, settings that enhance the characters or the story are shown. How does one bring this to tabletop? The most important element is a setting that reflects the journey of the characters at the table. This requires an understanding of your players' characters, and the context of the campaign.

Looking back at the goblin encounter, what does that battle look like at your table? Is your paladin having a crisis of faith? The battle could take place in an abandoned temple. Do you want to stress the emptiness and distance from civilization? Imagine a barren tundra or the shifting sands of a desert. Is a theme in your campaign a celebration of ingenuity and progress? The scene could take place in a techno-marvel such as an airship.

This is all much easier to talk about than it is to do. First and foremost it requires an understanding of the themes at your table as well as the drive of the characters present. Not every scene has the capability to do this. Due to the nature of a tabletop game, your games will sometimes lead you to places that writing won't have much control over. Perhaps one out of every ten sessions you will see the possibility for something more. Something iconic. A place that exists not as just a backdrop, but elevates the tension of the story and the conflict within the players' characters. After all, your story could take place anywhere—so why here?

INTRODUCTION TO AGRICULTURE

Biology

Economics & Industry

History

Hexarch

The human body requires two to three thousand calories of food a day to function along with a combination of protein, carbohydrates, fats, vitamins, minerals, and fiber. Since nothing can supply all these needs alone, humans must access a variety of foodstuffs to keep themselves healthy. One strategy used to acquire sufficient nutrition is agriculture, cultivating crops and livestock that will provide the bulk of what a community will eat. In this article we will focus exclusively on the farming of plants, its origins in the Neolithic period, the types of crops that are grown and eaten, the basics of irrigation and other ways to make growing crops more efficient, as well as the concept of carrying capacity. While your world may contain non-human species, the broad strokes of the information covered will apply to any species that needs to eat in the same or similar ways humans do.

The domestication of plants was a requirement for the development of agriculture. Domesticating a plant means imparting a permanent, genetic change beneficial to humans. The process is a slow one, taking many generations and the earliest instances of plant domestication known to history began in the Middle East with wheat and barley ten to twelve thousand years ago (Sutton and Anderson, 177). The seed pods of these grains were attached to the stalks by a thin stem that would break when fully matured, scattering the seeds. Some stems were tougher and would not break, making them much easier for humans to harvest. These seeds were brought back to settlements, and uneaten ones matured into plants nearby. Over many generations, this eventually lead to the plant changing on a genetic level into a strain that could be farmed thanks to their tougher stems. This process repeated itself independently in other parts of the world. In the Yellow River Valley of China, rice and millet were cultivated. In Mexico, people domesticated squash, beans, and chili peppers. South American agriculture gave rise to the peanut and potato. As you can see, domestication can occur in wildly different climates with a wide variety of plants. All that is required is people encouraging useful changes in their food.

Once the process of domestication was complete, agriculture began to alter human culture. Before cultivation, human populations used the land broadly, utilizing a wide variety of resources from multiple biomes. With agriculture they began to use the land intensively focusing their efforts on a small amount of land capable of supporting their staple crops. This meant populations became sedentary, living in one spot rather than moving from place to place depending on available food. The surpluses of agriculture meant that not everyone was required to gather food. These people could be artisans, making tools or luxury goods. They could be astronomers, or architects, or soldiers. The domestication of plants (and animals) led directly to extensive divisions of labor within a culture. These divisions are the foundations of what we would call an advanced or complex society. As with the dispersed nature of domestication, the rise of complex societies happened independently across the world. Where domestication took hold, complex societies followed.

When agriculture took root within a culture, innovation would begin soon after. People would begin to experiment with different ways to grow more food than they had before. There are two ways to increase the amount of food produced by agriculture. The first is increasing the amount of land that can be productive through irrigation, the act of diverting water from where it is plentiful to where it is needed. The second is the improvement of techniques used on already productive land. In the case of irrigation this can be as simple as digging a trench to divert water from a creek or as complicated as pumping water from aquifers from deep underground. On that same note, improving techniques can range from using a digging stick instead of your hands to using a tractor.

Through most of history, irrigation was the best way to put more land under cultivation. There are two kinds of irrigation, natural and genuine. Natural irrigation depends on weather events like rain and flooding to water crops. Genuine irrigation is the use of human construction and labor to bring

water to where it needs to be. (Sutton and Anderson, 273) One manner of achieving this is to dig canals to divert water from its natural path to one more useful for humans. Another is to build dams to create artificial lakes to use as reservoirs. A third is to dig deep wells to find water under the ground and bring it to the surface. All these methods can be enacted on a small scale, but the larger they get the more considerable technical know-how to plan and a large amount of labor to construct is needed. This is an example of the feedback loop between the amount of available food and the complexity of society. Considerable effort must be put in to the task of educating and training the engineers who design large-scale irrigation systems. Similar effort must be put in to feeding the workforce that builds and maintains the canals and wells and dams. This effort requires the food surpluses from agriculture, which in turn creates more food to feed the people now needed to maintain a complex irrigation system.

The other way to increase the amount of food produced by a plot of land is to improve farming techniques. Breeding, an accelerated version of domestication, is one of these ways. Mixing strains of one kind of crop can produce offspring with beneficial traits. A new strain may provide higher yields or resist cold temperatures, allowing for a more stable food supply. Adopting the use of beasts of burden is a way of maintaining yields without having to recruit more labor for a field. A team of horses or oxen can greatly reduce the amount of time and labor needed to produce a certain amount of food, especially over large fields. They can also make the transport of food to market quicker and more efficient. Tools like plows or water-powered mills reduce the effort needed to make food. While these tools and techniques were invented at different times, the nature of agriculture itself did not change until the onset of two inventions. The first was the internal combustion engine. The arrival of tractors and combines slashed the labor required to produce certain crops, as well as cutting their prices. The second great invention, refrigeration, changed the way people eat. Staple crops like wheat or potatoes were so favored because they were easy to store and transport. A bushel of wheat could be stored for years under the right conditions, but an apple won't last nearly that long once it's been picked. Refrigeration allowed for a wide variety of crops to be sold at great distances without spoiling, allowing for a wider variety in diet. Other technologies, like fertilizer or chemical pest control made their

mark on agriculture, but nothing was as transformative as the combination of the internal combustion engine and refrigeration.

All these subjects leave us with a question, how do we determine just how many people a plot of land can support? This simple question has a complex answer. One aspect of that answer is Liebig's Law of the Minimum (Sutton and Anderson, 49), which states that population will be limited by the scarcest resource. For example, if there is enough water to support one hundred people, but only enough food to support fifty, the population will naturally be capped at fifty. Another aspect of the answer is the boom and bust cycle. This cycle consists of humans manipulating the environment and briefly pushing the land past its carrying capacity, only to have their efforts fail and famine set in, reducing the population to a number the land can support. To know how many people a piece of land can support, you must know how it is being used. Say a hundred acres of land along a river could support ten hunter gatherers making use of all the game, fish and forage that grows there naturally. That same plot of land could support a hundred people if it were used for agriculture by a complex society. If that complex society underwent an industrial revolution and developed all manner of modern machines, then that piece of land could support a thousand people. Carrying capacity depends less on the land itself and more on how people make use of it.

We've seen the slow progress of domestication and the rise of complex societies. We've talked about types of irrigation and the use of technology and technique in agriculture. The question now is what does this mean for your world? Apart from certain kinds of fantasy or sci-fi creatures, everything needs to eat something. You can use the information we have covered in this article to build your world on a much more intimate scale. Knowing the nuts and bolts of food production will tell you what occupies a large part of the population in the case of low-tech or low-magic worlds. Working out what food is available when and it what amounts can tell you what the rich and the poor eat. An in-depth knowledge of the agricultural practices and technology of your world will give you a solid foundation to build off of.

Source:

Sutton, Mark Q, and E N Anderson. *Introduction to Cultural Ecology.* 2nd ed., AltaMira Press, 2010.

	by Cryssalia
	Hu'ev Berry Cake
	to during Sham'ari Qi'rone (Blue Moon
	Hu'ev Berry Cake is a steamed cake only made during Sham'ari Qi'rone (Blue Moon
	Festival). The Hu'ev Berry, the main ingredient, are extremely rare berries that only grow
	the night before the Blue Moon occurs. It was believed to cleanse the heart and soul from
	sins when consumed. Nowadays, the cake is consumed by everyone. However, it is only
	restricted in the Holy City of Qadena due to the quick expiration of the pastry.
	Ingredients: Frosting:
	Hu'ev Berry - 2 Cups Jir Cheese
	El'brij Flour - 3 ½ Cups Sugar - ½ Cup
	Burkur Eggs – 2 eggs Yumen Juice – Half fruit
	Jir Milk - 1 ½ Cup Hu'ev Berry - ½ Cup, mashed.
	Sugar - ½ Cup
	Salt - A pinch
	Yumen Juice - Half fruit
	Steps:
	Mix the flour, salt and sugar in one bowl.
)	Mix the flour, sait and sugar in the mix the flour, sait and sugar in the mix the wet ingredients in a separate bowl and beat it with a whisk till there are no bubb
	Mash the Hu'ev berries in another bowl, save half of it and mix the rest with the dry
	ingredients. Put the wet ingredients in and mix them well until the batter turns bluish
	Put the batter in the cake pan and into the steamer.
	Steam the cake for 5 hours on big flame.
	Frosting:
	Mix the cheese and mashed berries into a bowl.
	Squeeze in Yumen juice and put sugar and mix them well.
5	Frost the cake and decorate it with Hu'ev Berries.
5	

THE GREAT GETABOUT RACE

Fiction

Science Fiction (Soft)

Debug200

Anhala glanced at the time machine on her wrist. *Blast*, she thought. The race would begin in two minutes—and she was stuck at the back of a massive crowd. The writhing mass was made up of those who couldn't pay to watch from a ship, or only cared about the chaotic first moments of the annual Great Getabout Race. A rather drab name for such a popular event, but no one was here because of the name.

They were here to see the glorious mechanical beasts display their raw power in a way only racing getabouts can. Some spectators marveled at the quick-witted reactions and skills of the pilots, while others gawked at the ingenuity and sheer stupid bravery of the mechanics who hung off the sides of their respective machines, trying to keep it from falling apart at the rivets. Everyone, however, was there to see the getabouts themselves: devouring the ground beneath them with vigorous energy, expelling surges of smoke through the outlets prescribed in the blueprints—and through some **not** so prescribed, demanding the maternal attention of their mechanics.

First year I actually decide to come to this stupid thing, no way I'm gonna miss the start, determined Anhala. She fought past a particularly boisterous thicket of Galfrens, who always seemed to take up more space than they needed. Haravels like herself were the ideal: short, slim, and efficient. I ran out of excuses for not coming to his crude, obnoxious races two years ago. This year, I finally decide to bite the bullet like a mature adult and now life wants to make me late. Well, life can forget it.

She shoved her way to the ticket booth, her limited military training and physique giving her a slight advantage in the scramble. Stuffing her ticket into the booth's slot, she stole another glance at her time machine. 40 seconds. More time than she'd expected, but she still had to get up to the last spectator ship before it took off. She glanced up the stairwell as she began sprinting up the steps. Briefly, she wondered whether she'd be able to scale the five stories in time.

A few hundred meters away on the other side of the spectator ship docks, out in the sweltering heat of the suns, Joel ran his eyes over the controls in his cramped cockpit one last time.

"Provy, dear, are you sure you topped off the carbane? Elevator levels look good?" he asked, his heart hammering as it always did before a race. A little faster than usual, perhaps. Although he had raced with Provishia many times before, this was the first race since their marriage. This one was special, and he didn't intend to screw it up.

"The *carbane*?" she scoffed. "There's three times as many failure points in this thing than in a Cosmellian cruiser's, well, *everything*, we're about to push them all past what they were designed for in blistering heat, and you're worried about whether I filled up the blasted *carbane tank*?" She shook her head in exasperation, pausing her own checks for a second to lean into the cockpit and give Joel a quick peck on the cheek. "You worry about making sure we don't crash, and I'll handle the rest, ok?"

Joel smiled and nodded, suddenly distracted by a wave of nostalgia. Growing up, he had been used to his sister being the person taking care of "the rest." She was the one you could rely on to get things done, keep things organized, that sort of thing. He was... not. Probably why he took to racing getabouts so well. They were antithetical to order and regulation. However, when she left home, he had to learn how to handle "the rest" on his own, and now he was having to unlearn it again with Provy in his life. Briefly, he wondered if his sister had come to the race. Her last letter had been noncommittal as usual, but maybe—his train of thought was interrupted by a muffled shout from the adjacent getabout.

"OI, JOEL!" shouted a large Galfren hanging precipitously off the side of his massive, shuddering getabout. "Don't forget which pedal is

which this time!" he said with a mischievous grin.

"Don't bother responding, he's just trying to shake you up," warned Provishia.

"Yeah, yeah, I know," responded Joel, not even looking in the Galfren's direction.

"Oh, of course, the great steel-nerved *Joel Berios* could never make such a mistake," the heckler continued, holding his hands out in mock deference. "Tell me, was it your idiot mechanic who got her left and rights crossed again?" Joel didn't mind verbal abuse directed at him; he probably deserved it. Yet insulting Provy—however poorly—struck a nerve he didn't know he had. Before he could retort, though, he was cut off yet again—this time by the announcer.

"THE TWELFTH ANNUAL GETABOUT RACE BEGINS IN FIVE!" Anhala dug harder into the steps, two flights from the top. She heard the spectator ship's engines strain as it launched from the dock. "FOUR!" She could at least see the start from the dock. Of all the stupid reasons to be late, why did it have— "THREE!" —to be an arachnovine stampede? Anywhere else, I could have gone above or below it but this blasted continent is so infuriatingly flat. I'm starting to remember—"TWO!"—why I left this place to begin with. Her breath became labored as she began climbing the last flight of stairs. "ONE!" She had only made it halfway up before a deafening explosion rocked the towering dock. Anhala panicked for a brief moment before the cheering made her realize that must have been the starting signal, not all of the pilots dying in a simultaneous fiery explosion. Although from what she'd heard of this type of audience, the cheering might have indicated the latter. The sound barely had time to fade before another explosion shook the stands a split second later—but this one did not fade. Rather, it increased in volume and intensity rapidly, causing the dock to shiver violently and drowning out the raucous applause. The intense oscillations slowed her progress, but she finally crested the top of the staircase and stumbled over to a nearby railing.

A few stories below, a thick, billowing cloud of smoke and dirt stretched from the starting line a couple hundred meters out, where she could barely make out a few getabouts leading the stampede. Judging by the deafening roar and thunderous earthquake, she surmised there were several more machines obscured by the nighopaque cloud. Tired dismay filled her as she had a sudden thought: ...which one is Joel's?

Joel could not see a thing in front of him. He couldn't even hear his own thoughts, despite the three levels of hearing protection he was wearing. He didn't need to see or hear, though. Piloting a racing getabout was a thoroughly spiritual experience, transcending such shallow physical senses. He got all he needed to know from the bond between Haravel and machine.

That, and he had run this course so many times he could do it in his sleep. Other pilots would forsake the most efficient route to try and get some visibility outside the cloud of dirt, but he knew exactly where he was. He didn't need the crutch of vision for confirmation. Provided of course, nobody did anything stupid in front of him. That was the risk of flying—well, driving—blind, but you don't win the Great Getabout Race by racing safe.

Not that there is really a "safe" way to pilot a racing getabout—they were notoriously unreliable and prone to breaking down often and in spectacularly fatal ways. That's why racing without a mechanic would be laughably stupid. While a pilot had to wrangle the mechanical equivalent of a seven-ton bull into navigating a long and dangerous obstacle course, the racing mechanic's job was orders of magnitude more difficult. Keeping that angry beast in one piece required scrambling to any spot inside or outside, keeping your footing while putting out fires, re-sealing holes, tightening what was left of your bolts, or hammering something back into place. Also on the mechanic's lengthy duty list was keeping carbane and elevator lines unkinked, blasting dirt off the driveshafts, and cleaning off the air intakes.

Provishia's right hand danced over valves and levers, her left hand keeping her steady as the getabout lept forward in unsteady bounds. The ground had been deeply furrowed by the racers in front of them, so firm, solid ground—the best surface for the getabout's hefty toothed wheels to grab—was intermittent at best. She diverted more heat to the static elevator chamber to decrease the getabout's weight, attempting to soften the abrupt dips. They'd lose a little bit of power, but they would lose it anyway in the furrows. She reached for the air blaster, and just barely got a hold of

it before the right side of the getabout abruptly dropped, throwing her out of the side. She hooked her feet into a bar and used the momentum to swing between two of the whirling wheels. She slammed unceremoniously into the underside. Her leather pads helped absorb some of the impact, but it still stung every time. Clinging to a handhold on the underside, Provishia pointed the air blaster at the driveshafts and began clearing out the dirt and muck that had already begun to build up, swinging wildly with the chaotic motion of the getabout.

I can't believe it never occurred to me to ask what his getabout actually looked like, Anhala thought, quietly cursing her lack of foresight. She normally prided herself on being able to anticipate problems, and here she was 0 for 2. First the arachnovine stampede, now this. This was her home only in technicality. She continued to watch the storm of getabouts, noticing a few more appearing on the sides of the cloud, trading a straight shot forward for better visibility. She was surprised at how varied they were; some were small and seemed to jump from rise to rise, while some were hulking monsters that plowed through the terrain with reckless abandon. The number of wheels varied from three to...well, too many to count from that distance. Knowing Joel, he's probably in one of the ones with more wheels than he needs, figured Anhala. Soon, the getabouts were lost behind a rocky slope as the course made its first turn, the spectator ships lazily gliding above them. "How am I supposed to get on one of those?" she muttered quietly to herself.

A voice behind her startled her. "They *are* magnificent things, aren't they? Funny you should ask, darlin'; I've been looking for a pilot myself, and my, do you look the part. You ever raced a getabout before?" said a tall Haravel. Anhala paused for a second, confused.

"What? Oh, no that's not what I meant, I just want to watch—"

"Ah, that's what they all say. Every pilot I've trained started the same as you did just now: staring in slack-jawed wonder at the untamed beauty that is a racing getabout in its natural habitat," he said, gesturing grandly at the course in front of them. "You've got racing blood in you, I can tell. Tried to scratch that itch with the Cosmellian

Navy, did ya?" he continued, nodding towards her dirt-covered military-issue trousers. She furrowed her brow, annoyed now. *This guy takes a bit too much pride in his observation skills.*

Provishia finished cleaning the driveshafts as fast as she could. She was no slouch at rodeoing, but she didn't want to press her luck. Especially underneath the getabout: it was one of the more dangerous places to be. The wheels were set high to create plenty of buffer space between the underside and the ground below her, but as uneven as it was she could still be scraped off the bottom by a jutting rock—a generally unpleasant experience. She released the air blaster trigger and waited a half second for the right lurch to swing back onto the side of the getabout. The dragon's share of the art of rodeoing was knowing how to ride the chaos and use the momentum shifts to your advantage.

Now properly upright again, she glanced to see what was coming ahead. They were in the middle of a long gradual turn, on a hillside slanted away from the turn's direction. The cloud of dusty smoke was clearing slightly, finally affording non-zero visibility as the getabouts spread out in the curve—the lighter machines taking a tight path higher up on the steeper grade, with heavier machines taking the longer but flatter route. She smiled, appreciating the genius of the course designers. The next step in the race involved a risky jump onto one of many paths at different elevations, and spreading out the contestants before that jump reduced the risk of collisions. It also helped ensure the racers choose different paths to jump onto. This provided more variety for the eager onlookers above, not to mention the narrowness of the paths only allowed one or two getabouts to be abreast at any given moment. She swung inside and began preparing for the upcoming burst of power they would need to launch onto the path they wanted.

"I'm not interested, thank you. If you'll excuse me, I'm actually in a bit of a hurry." Anhala was trying her best to be polite despite her rapidly growing distaste for this Haravel. Something about his overly friendly mannerisms just didn't quite sit right with her, nevermind his misplaced confidence in her desire to be a getabout pilot, of all things. Never in a million years would she willingly set foot inside one of those death machines.

"Ah, well, sorry to hear you say that, darlin'. I *do* hope you'll reconsider. Here's my card if you change your mind." He handed her a small slip of a paper, which she brusquely stuffed in her pocket and strode off. He seemed to have given up rather easily, considering his initial enthusiasm. She shoved the conversation to the back of her mind, a mystery she'd deal with later. She had to find a way to get onto a spectator ship.

She cast a trained eye around, taking in the docks. The few stragglers who were up here just to watch the start of the race were now slowly trickling down the stairs, chattering as they went. A few were headed over to a couple smaller ships on the far right side, boarding after showing their tickets. They seemed to be ferries—one shoved off from the dock, and headed off at a good clip towards the large spectator ships in the distance. She walked across the dock with long strides, moving as fast as she could without breaking into a jog. The ferry captain barely acknowledged her as he glanced at her ticket and waved her onboard. A mixed sense of relief and impatience washed over her as she sat down, her view of the race obscured by the rocky ridge. She'd have to resign herself to the pace of the ferry, which she had no control over. She was not fond of giving up control.

Provishia strained to tighten a patching collar around an elevator pipe. Multiple streams of superheated elevator gas hissed from various points along the winding pipe, protesting her efforts to extract more power. I need to time that switch just right, she reminded herself, trying to stay focused amidst the pounding noise of the straining engine. The moment their wheels left the ground she would need to divert as much heat as possible from the rotational motivator to the static elevator chamber, lowering their effective weight to get more airtime. It was a common maneuver—but then again so was wrangling an arachnovine, and that didn't make that easy either.

Joel kept a steady hand on the transmission controls, shifting through gears as they built up more speed. The wheels spun with brutish fury, tearing through the ground as the getabout surged

forward, slinging dirt and rock behind it. He coaxed the getabout slightly to the right, hoping to catch the best rise leading to the jump, and aimed for their chosen path. It was the riskiest of the five possible paths, but if you could successfully navigate the subsequent precarious jumps along the steppes it was a significant shortcut.

Anhala bounced her leg impatiently. It's a good thing they don't race these things, she thought dryly to herself. Everyone would die of boredom. Or thirst. Or old age. Looking over the brow for seemingly the fortieth time, she estimated they were technically closer than the last time she looked, but progress was frustratingly slow. The four oarsmen strained to push the ferry through the air, each stroke of the large paddle-sails shoving the ferry forward. She couldn't believe that they were using one of the oldest, slowest, most primitive methods of locomotion at a racing event, even for a simple ferry.

Sighing loudly, she stood up. The ferry captain looked at her and started to say something by way of inquiry, but she walked right past him.

"Move," she ordered the weakest-looking oarsman. He looked startled, glancing between her and the captain.

The captain started to object. "Ma'am, I'm afraid you can't just—"

"I'm a Lieutenant Commander in the Cosmellian Navy. I can handle an oar. Have him go help his buddy on the other side." The captain paused, weighing whether it was worth it to try and make her sit back down. He was sure this was a breach of some protocol somewhere, but she looked both more capable—and more motivated—than the oarsman did. He nodded his acquiescence, figuring the less of a big deal he made of it, the less chance there'd be that he would be given trouble about it later.

You know, this would be a really bad time for the thermokinetic inducer valve to fail dramatically, Joel thought to himself. If he made a big enough point of it perhaps the universe would deem such an act of mischief too obvious to actually do. Moments away from the jump, he reached back and found Provy's hand and they exchanged a

tight squeeze. With his free hand, he pulled the dynamic elevator chamber's control lever all the way back, shoving the chamber all the way to the front and lifting the front of the getabout as they sped off the edge of the cliff. Provishia tore her hand away and spun the thermal actuator as hard as she could, diverting the thermal energy from the furnace towards the static elevator chamber. Joel eased the control lever back forward, leveling their flight as they soared through the air. For a few golden moments the noise abated and the getabout rose as gracefully as an angry bull. Then, gravity reached up and grabbed the getabout once more. It began to fall, and Joel and Provishia braced for the coming violent landing.

The pair were thrown abruptly forwards as a thunderous crash announced their arrival back on terra firma. Provishia saw a flash of light. A stabbing pain in the left side of her temple—no, the right side—suggested she may have hit her head on something in the impact. She knew there was something she needed to do besides just hold her aching head, but she was having trouble focusing at that particular moment. Up front, Joel was not faring much better. Blindly reaching with his hand, he found the lever he wanted and threw it forward. A harsh grating sound screeched from all eight wheels as they scrambled to find purchase in the rocky ground. Provishia groaned. This was not helping her headache.

Despite there being two Haravels on one oar, they still struggled to keep up with Anhala. To her chagrin, she had to reign in her rowing so as not to throw the ferry off course. They were, however, making much better time than they had before. Peering over the bow she could see glimpses of the getabouts between rocky peaks—or at least, the dusty clouds they were kicking up. After a few more minutes that seemed like hours, the ferry captain finally stood up and began preparing to dock with one of the spectator ships. He studiously ignored Anhala, which was just fine with her.

Joel and Provishia were thrown forward again, with the completion of a second, shorter jump. The path they had chosen would lead them through a series of jumps over the many other winding paths below them. It was a grueling course, taking

a toll on both machine and occupants. However, the upshot was that while the other contestants were winding around the jutting steppes, Joel and Provishia were skipping across them in a (mostly) straight line. Provishia grimaced, knowing she'd have to make another foray outside to keep the getabout together before the next jump. She leapt out the left side, using her hands to swing up on to the top of the machine, where she had better access to the engine couplings. She quickly grabbed the hook from her mechanic suit and secured it onto an anchor in case she lost her footing—an alltoo-likely scenario, given how much the getabout was tossing to and fro. Sending a quick prayer to the gods, she grabbed a wrench from her belt and began retightening the many bolts that were attempting to wriggle off of the getabout.

The other occupants on the ferry shuffled to the side, making way for Anhala to exit first. She made her way across the gangplank with long strides, sizing up the ship as she went. It was longer and narrower than most ships, especially the ones she was used to in the navy. There were a few spectators on the side she entered on, getting drinks or a fresh bag of Loroseon rolls. A couple hawkers were waiting for the ferry occupants, ready to sell their wares.

"Care for some binoculars, miss?" said one, waving a pair in her direction. "Them getabouts are a real beauty up close!" She shook her head slightly and avoided eye contact, not keen on slowing for a conversation. She quickened her pace, pressing on through a pair of doors to the other side of the ship.

Her eyes widened, surprised by the layout. This entire half of the ship was covered in window panes, with spectators lining the outside edge of every deck. There were multiple staircases connecting each deck all down the middle of the ship where she was. She walked down a couple decks until she saw an open spot on the outer edge where she could see out. I didn't realize there were so many people who cared about landbound vehicles. What's so special about vehicles that can't fly? she thought to herself as she made her way to the windows. The excitement from the other spectators was palpable, with periodic bursts of cheering, animated chattering, and constant pointing and gasping. If they get this excited

over some dinky rolling dead weights, they would lose their minds if they saw a real Veskalarian mountainchase. Those clippers are paragons of speed.

Finally, she got to the window. She looked down, arms crossed, at the racing course. Below, the getabouts were each jockeying to get ahead of each other, spread out over half a dozen paths that often crossed over or under each other. Their snarling engines and the complaints of many overburdened mechanical joints could be heard even from where she was, high up and behind the glass. They tore through the ravines and steppes with an unbridled spirit. She blinked, suddenly noticing something. Wha....who's that maniac jumping over the race course? Is that even allowed? And is that—there's someone on top of it?! What are they thinking?! she thought incredulously. Finding herself gripping the railing, she realized what everyone else was so animated about. These idiots, that's what. The wildness of the whole spectacle just struck her all at once. It wasn't about the speed, it was... practically a party. With the partygoers strapped inside—or outside—carbane-fueled mechanical beasts, and few rules to get in the way. She may not admit it aloud, but she felt a sort of mad fascination with the whole spectacle. She stood transfixed, mesmerized by the insane chaos on the surface below.

Despite herself, she smiled.

Coming Soon

Beginning in the next issue of *Worldbuilding Magazine* we will add a new Ask Us Anything segment.

If there's anything you're interested to see discussed, questions you have pertaining to your world, or if you're just curious to know more about the staff here, ask away!

Interested?

Submit questions for this segment to us at contact@worldbuilding monthly.com or on Discord!





HOW LONG SHOULD BREAD DOUGH RISE?

Food

Culture

StronglyOPlatypus

For how long should bread dough rise? It's a simple question with a complex answer. Let's begin by thinking of what bread means, as well as the situations different types of bread might exist in. Imagine this: the smell of freshly baked bread wafts through the kitchen, inside of which a child stares longingly at a warm, pillowy loaf fresh from the oven. Or, perhaps, a veteran soldier tears into a flatbread made from dough spread thin on a shield, then put by a cookfire. Maybe a family shares fresh, buttery rolls around the dinner table as a holiday treat; a rare one in a city where stale crusts and watery soup constitute a typical meal.

Bread plays a unique role in many societies as a staple food. Billions around the world eat it and there are thousands of ways to prepare it, spanning societal, linguistic, and natural boundaries. It's a symbol of equality and diversity. Two armies may hate each other with a passion, wanting nothing more than to kill each other, but as night falls and the battle ends the survivors will slink back to their camps and sate their hunger, no matter the color of their uniform, with bread. Even so, it may not be the same bread. If you take a tour of the bakeries of Europe, the Americas, North Africa, the Middle East, you'll find that every nation has its own bread tradition, with wildly different preparations and end results. These differences are a worldbuilder's best friend.

In some places, such as east Asia with rice and Pre-Columbian America with corn, other staple foods fulfill the same roles as bread (of course, fictional foods can do so just as well). Any reader of George R.R. Martin is well aware of the fact that food can be used to show off a world's detail, but even if one doesn't spend paragraphs describing a grand banquet a simple staple food like bread can be used to communicate information about the world. There are numerous ways that one loaf can be set apart from another, but leavening or proofing (using yeast to cause dough to rise) is a prominent and obvious choice, and a wealth of worldbuilding opportunities lie in just this very specific detail.

The easiest amount of time to let bread dough rise is none at all. Not using yeast or giving time to proof is simple and produces flat, hard goods. Biscuits, crackers, and hardtack are useful as snacks, or as long-lasting food for journeys and campaigns. In the real world many unleavened bread has religious significance; matzo is eaten during the Jewish holiday of Passover. During this time, in remembrance of the legendary fleeing of Egypt when there was no time to wait for bread to rise, leavening is forbidden. Christians eat bread, often unleavened wafers (though Eastern churches tend to forbid unleavened bread for this purpose), as a religious ritual where the bread is the body of Christ. On that note, it is no coincidence that Jesus distributed bread and fish, or that the Our Father asks to "give us this day our daily bread."

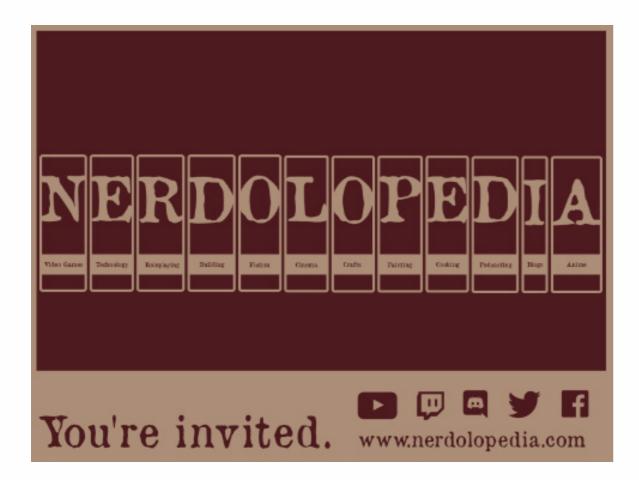
Unleavened or slightly leavened doughs often create flatbreads: pita, naan, injera, the list goes on. This is probably the oldest type of bread. Flour and water on a fire-heated rock is not very technically demanding, so prehistoric hunter-gatherers could easily have made such a bread. These breads can be fried, baked with toppings, and dipped in hummus or whatever alien sauces might be available in your world. Yeast and a little bit of time yield fluffier and less dense breads, so leave the bread to rise for a couple hours and you've got pizza dough, ready for a brief stint in the oven and greasy, crowd-pleasing cheesiness.

In order to understand the impact of letting bread dough rise it's important to know why we do it. Leavening dough with yeast is what gives us the traditional, crusty, light loaves we think of when we hear the word "bread". Most breads are left alone to rise, punched back down, then given more time to proof a second time. Doing so creates finer grain and knocks out large air bubbles. Seeing this type of bread implies that a sedentary culture, which has at least semi-permanent settlements and someone at home to prepare and bake the bread over the course of a day, invented the recipe. Because leavening takes hours to complete, stable conditions, and ovens to bake the risen dough you will not find much bread in the hands of nomads.

Although the Rule of Cool could theoretically apply to an alternate-history baguette-wielding Genghis Khan, if you so desired.

The difficulty and time constraints of making bread are also something that has to be considered. Some breads, like sourdough, need specially prepared starters that ferment for days before the bread is actually baked. Doughs that require a lot of kneading and leavening such as Italian panettone, aren't likely to be prepared often by your average person. Of course, if yours is a more specialized world, the town baker can do all the work and the consumers can enjoy the bread-man's blood, sweat, tears, and toast. But in general save the labor-intensive, complex recipes for important festivals, or days when your characters wouldn't typically have much to do. That is, unless tentacled sky-monsters attack, or the Big Bad Evil Guy kidnaps their family, interrupting their kneading process and kicking off the plot.

Of course, these details and implications are not exclusive to the amount of time bread dough rises. Changing any staple food, or any element of preparation, can drastically influence the cuisine of a world's peoples. These are the variables that must be considered while laying down the foundations for creating a fictional cuisine and unique foods that fit nicely inside the greater world. And while it's fun to fantasize over elaborate banquets or cultural dishes, a worldbuilder would be remiss by neglecting bread, or rice, or corn, or some entirely fictional staple food, and the myriad ways they can be used. Hopefully, this article got you thinking and showed you the possibilities that can come about from the simple question: "How long should bread dough rise?"

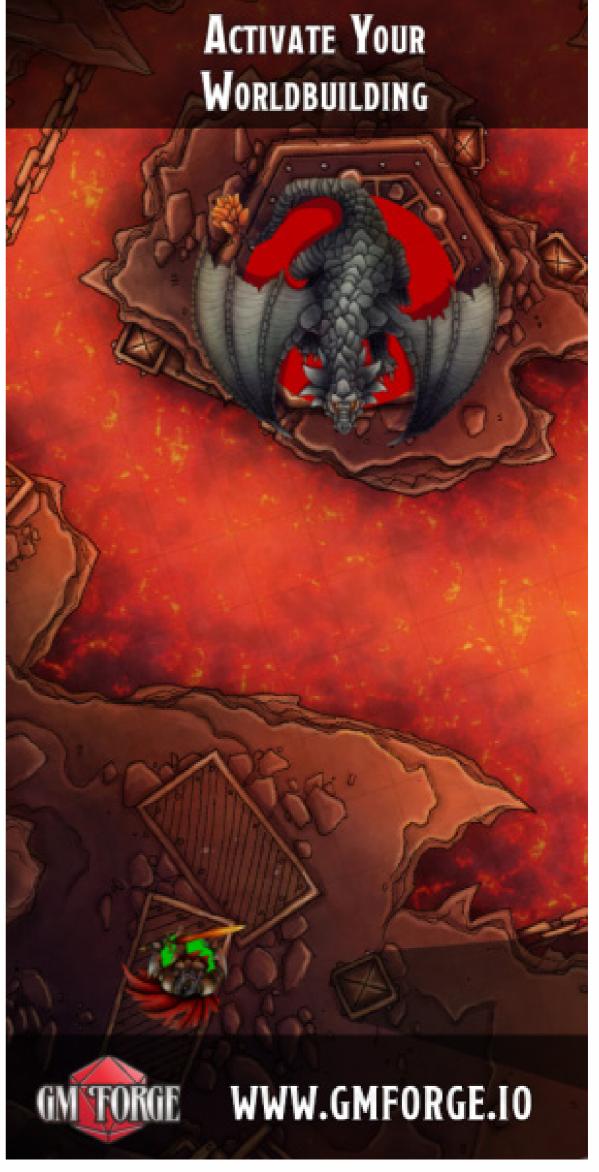


Sources:

Bernstein, Max. "Breadmaking 101: All About Proofing and Fermentation." *Serious Eats*, <u>www.seriouseats.com/2014/09/how-to-make-and-proof-bread-dough.html</u>.

Martin, George R. R. *Game of Thrones*. Home Box Office, 1996.

The Gale Group Inc. "Bread, Symbolism of." Encyclopedia of Food and Culture. 2018. Accessed March 15, 2018. http://www.encyclopedia.com/food/encyclopedias-almanacs-transcripts-and-maps/bread-symbolism.



THE ART OF GLASS

Fantasy (Low)

Fiction

StronglyOPlatypus

The glassblower's apprentice watched as his master worked. The molten mass slowly morphed from a shapeless blob into a glowing red spear, constantly spinning in the forge then rolling on the table as the glassblower fought against gravity. The master held his glassblowing pipe aloft, guiding a firm but gentle gust of air from his lungs into it, then released and sealed it with his thumb.

"Have you ever played the flute?"

The apprentice blinked. He had been so mesmerized by his master's work that he failed to process the question.

"I suppose not then. I haven't either, but my mother used to. She tried to teach me, but I could never get the notes right. I like to think blowing glass is sort of like playing a flute, though. Instead of turning air into a song, I turn it into a vase."

"Perhaps I should try to learn the flute too, then."

"Perhaps."

The apprentice wasn't sure how his master managed to talk while working. When the apprentice made glass, it required his full attention, or he would stop spinning the pipe and the piece would droop. More than a few projects had been lost that way. However, the master was somehow capable of carrying a full conversation as he practiced the art, skillfully molding the scorching hot putty while simultaneously navigating the intricacies of a social interaction. In fact, he seemed to do his best work when the apprentice was there, talking and fetching things.

"Grab me the jar of white. This one's going to the caravan and the white ones always sell best."

The apprentice searched the workshop but found no sign of the color jars. He sighed and put a foot onto the ladder, climbing to the roof and locating the rough ceramic container. While lowering it down by a fraying rope, the apprentice wondered whether other cities' glassblowers were

as demanding to learn under. The master was kind enough, but to the apprentice's knowledge he was the only one in existence who insisted on coloring each piece with sharp, crushed up shards of glass. Other cities produced only sand-colored or clear-green glass, and they seemed prosperous enough.

After hearing the satisfying thump of the pottery against the ground, the apprentice snuck a small, slightly stale chunk from the breadbox. His mother's voice instantly reprimanded him, but he insisted to himself that it was different for him. The baker gave the glassblower two loaves a day; it would be a shame not to tear off a few crumbs every so often. Odd that a person who he hadn't seen in years still scolded him.

"We're almost out, by the looks of it. When I'm done with these vases, I'll make some white glass and you can grind it up with that new mortar."

The apprentice sighed. His cuts had barely healed from last time.

"And don't eat too much of that bread!"

He muttered an apology under his breath, much too softly for the glassblower to hear, and returned to the workshop.

"Have you ever seen snow?" asked the master as he arranged the powdered glass shards into a pattern.

"What's snow?"

"Neither have I." The apprentice blinked, confused at the non-answer. "Twenty harvests back or so, I believe you weren't alive then, a group of traders came through the city doors. They were from a place we'd never heard of. I don't think the sun touches those lands, because they would turn red and seek shade whenever it came out. It was quite a spectacle, and they stayed from the thin moon to the full moon."

"That's a long time. Traders are usually gone in a few days."

"And what a memorable time it was. They shared a meal with me one of those nights, a salted fish they had brought with them. I hadn't learned to make portraits yet, so instead, I thanked them by showing them how I made my vases. When I brought out the shards, one of them told me it looked like snow."

"You never explained to me what that is," complained the apprentice. He thought he detected a grin on the master's face as he rolled the fiery-orange glass in the white shards.

"No. I didn't know either. When I asked, they said it fell from the sky like rain. It would cover the ground like a blanket, piling up on roads, blocking doors, making travel impossible for weeks to months on end. They said every drop of the stuff was a work of art, sculpted by some god of theirs. Anyway, they bought plenty of ornaments and containers. Those traders were like children when they saw the glass. It was as if they had never touched a vase."

"And yet they talked of something insane like snow as if it was normal?" The apprentice frowned, both disbelief and curiosity in his expression.

"Yes!" The glassblower cut the lip of his piece from the pipe and set it in the kiln. The apprentice noticed that the light in the workshop had begun to glow a bit softer, so he tossed a piece of wood in the fire and pumped the bellows. The flaming flower of the forge lashed out and licked the glassblower's pipe as the master continued talking. "Your sister is a painter, correct?"

"Yes, Father. I'm supposed to bring her inks from the caravan tonight."

"Hmm, can that wait until tomorrow? The hunters wish to dine with us." The glassblower stopped moving for a second, thinking. He nearly dropped the piece of glass he just started on. His face had a grave expression with a tinge of something else. Hope? Regret?

"Father? Is there something wrong?"

"No, no, just thinking. I wanted to ask you if you and your sister would be willing to accompany the caravan after the next sowing. They are going to try

to find the land of those traders. I would have you sell our wares, while she would make a landscape. I can never travel there because I need to tend the workshop and keep up the trade, but I should like to see the land where glass falls from the sky."

"Leave? With so much left to learn? And she is too young for such a journey."

"It is true"—the glassblower started on another vase—"that you still are not yet a glassblower. But who knows whether you will be one after the next sowing? I think this piece is going to take me a while, so you have time." He held the pipe in one hand just long enough to scratch his chin, somehow still rolling expertly.

"You know what? I changed my mind," said the master. "Go get your sister's inks. She will have to practice if she wants to paint such a dark and bizarre world as the one those traders came from. Tell the merchants I sent you, they still owe me for the last time I supplied them with glassware."

"Welcome, glassblowers. Feel free to take as much food as you require. Thanks to you, there is plenty to go around."

The huntress normally spoke with a weary voice, too tired for formalities, and had dark circles under her eyes. Tonight, she did not. Nor did any of her companions, the apprentice noted. There was a large, roasted beast strewn across the dinner table. The master and apprentice took a seat, both pleasantly surprised to find that their wine cups were made of glass, rather than ceramic. There was a deformation in the apprentice's. He remembered when he made that lump, because a bird had decided to roost on top of the kiln. He had warded it off with one hand while the other kept his handiwork spinning, then had distracted himself trying to make up an explanation for the green feathers littering the floor and the too-thick appearance in the cup.

"The feeding trays you made us for our traps worked like a charm," a hunter said. "Some of us were worried that the glass was too fragile and fine and that the animals wouldn't eat from them, but every one caught prey."

"It was not easy to make them. The herbs I put in the glaze were expensive." "I suspect they will pay for themselves a thousandfold."

So that's why the apprentice had made the trek to the herbalist, picking up foreign berries, strange brown roots, and all manner of oddly shaped leaves. He had thought his master needed medicine. The glassblower smiled at him, then shoved a still-steaming skewerful of meat into his mouth. The apprentice copied his example and, soon, the entire room was eating.

The meat tasted savory, reminding him vaguely of pork. He was not very familiar with the beasts of the woods, and he had a feeling that he wouldn't understand the answer if he asked the hunters what animal it came from. Perhaps it would be a good idea to leave the city walls with the caravan; the apprentice *had* always wanted to see an animal other than the occasional pig or dog. When he bit down into the meat, juices leaked onto his tongue; fresh, not salted.

Some of the hunters did not even use skewers. They just grabbed the food and ate, tearing off pieces of flatbread and using them to mop up drops of sauce and juice. When even the glass-blower joined them, the apprentice realized that a skewer just wasn't capable of holding nearly enough of the delicious, tender meat before switching over to his hands. He pulled a bit of meat

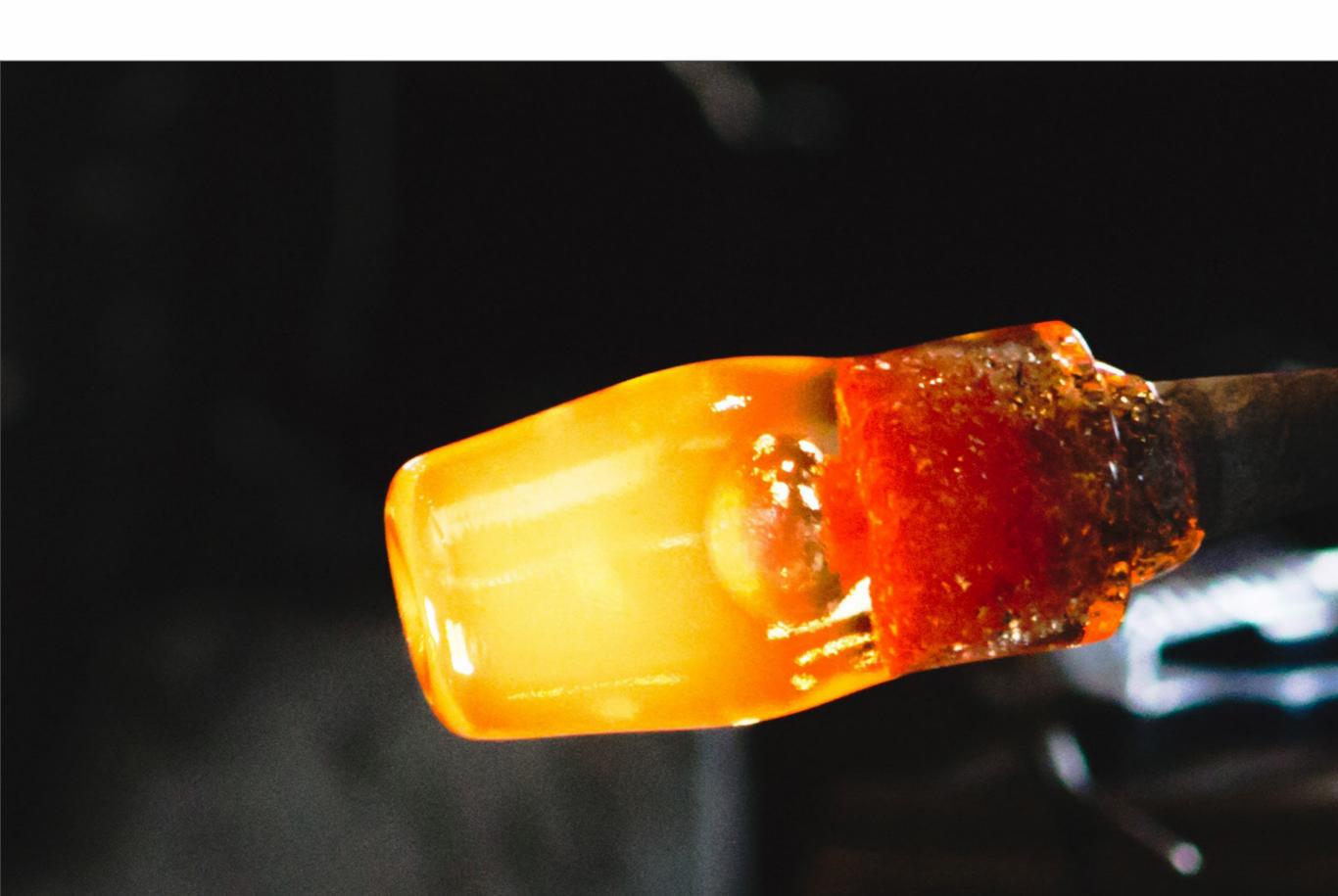
straight off the animal and ate it on a piece of the fluffy, buttery bread. Upon finishing that, he discreetly took another two large pieces.

"The bakers don't make bread like this. Where did you get it?"

"We give them meat for unused dough," replied the huntress. "And we don't have an oven, so we fry it instead. Don't tell them, though. Some of the bakers can get real pretentious about their bread."

The glassblower shot the boy a worried look, for he knew that the next time they went to see their baker, he would find a mess of dough smeared on whatever flat object the apprentice could manage to find and fit in the forge. He would have no problem getting the dough; a portrait had been done of the baker, and the baker was in their debt. Besides, all of his ingredients were stored in glass containers. He wouldn't dream of denying the glassblower's apprentice such a request.

Dinner wound into the dark hours of the night, despite the hunter's suggestions that they go home before it got too dark. Most people didn't stay away from their homes this late. The mud of the houses was hard to see at nighttime, and if someone wasn't home by sundown, they would often find themselves lost. The glassblower had set out to fix that. He and his apprentice had fashioned a



lantern to sit on the roof of their workshop, shaped and cut with holes so that air would flow in but the fire could not escape and burn their possessions. They could see it from the center of the city like it was one of the brightest stars in the sky. A few of their trade partners and friends had already adopted the system, and the glassblower was now trying to stop it from spreading lest too many people start using it and the entire thing be rendered useless. Between fistfuls of food, the master extolled the virtues of rooftop lanterns to the hunters, and simultaneously explained why he would not make them one. They countered by saying it would light the streets, making navigation easier, but he was adamant in refusing them a lantern.

The master was eating much more than usual. He wasn't a large man; by this point he would have already stopped eating on a normal day. Clearly, this was not a normal day; he was halfway finished with a large rib and showed no signs of stopping. Thick brown sauce, red juice, and stray flatbread crumbs collected in his graying mustache as he methodically stuffed himself beyond possible enjoyment. The apprentice sighed and dropped the piece of bread he was biting. Only one thing could happen after the glassblower ate that much in a night.

Glass portraits were prized possessions. It was one thing to see your face in ink, as a painter would depict it, but it was another thing entirely

to see it in the center of a shimmering sphere of glass, the sunlight peeking through each feature with eyes illuminated in brilliant colors more vivid than in life—close enough that one could pretend that's how they really looked. The master's portraits stood leagues above any other glassware in existence. The subjects of the portraits often wept when they saw them because they never thought their image could be so glorious to behold. Some thought divine magic was his secret to capturing someone's likeness so well, but glassblowers in other cities had prayed every day for similar abilities to no avail.

The apprentice knew better. It was hard work, usually three continuous days of it. The master would eat enough the night before to hold him over until he was done, or at least enough so the hunger wouldn't interfere with his work.

He spent most of that time laying out the portrait. He always began with a layer of green. It puzzled the apprentice, but the master insisted that the green was essential for making the skin color. Then came the browns and whites, pinks and reds, and whatever else deemed necessary; layer by layer, hour by hour. Then, he would mix it in with black to create the shadows. He would spend the rest of the day pacing around the room, fixing all the little details, and finally pushing it together so that, when he blew it, it would make accurate proportions. The



whole process took nearly thirty hours, done in a space smaller than the width of a hand.

Then, he would carefully encase the portrait in molten glass with a special tool he created and work it into a globe about the size of his fist. It would have the kiln to itself because the glass-blower never worked on anything else during the process. He would give it to the apprentice to place in the town square, and he would leave it there while the master finally let himself eat. It always found its way to the proper recipient as no one else would dare to touch it and have the face on the portrait brand them a thief.

They finished the meal, delighting in the fantastic aromas and the company of the hunters. Three days later, a portrait of the huntress appeared in the town square.

"Sit down," the priest instructed the glassblower. His guest smiled and gave the table a few knocks, making satisfying thumps as his fist hit the smooth wooden surface.

"Cedar. A long time has passed since I last ate at a cedar table. I believe it was with the hunters."

"Oh? You are one of the richest men in the city. I can't believe you don't have the money for a wooden table. A carpenter might give you one just for a portrait."

"Do not mistake my remarks for lamentations, Your Holiness. I could have twenty cedar tables if I wished," stated the glassblower idly. "A portrait is worth far more than a piece of furniture. Perhaps if the carpenter promised to give me and the apprentice fine coffins to die in and a few chests. They'd have to be unique, of course, something I couldn't buy elsewhere. But anyway, I prefer to eat sitting on the roof with the sun warming my back." The priest glanced at the window and the sun outside—bright and hot—roasting the passersby on the stone road.

"Forgive me then, for this luxury," the priest apologized. "How is my son? Is he really of child-rearing age?"

"Not quite, your Holiness. But almost. He embarked a few moons ago with the caravan. Knowing him, he'll be coming back home with a

wife. Without a master to train him, there'll be nothing stopping him from going off with the first strange woman he meets."

"I see." The priest sensed a bit of bitterness in the glassblower's tone. "Are you at all upset about that?"

"No, of course not—I encouraged the boy to go! I've never seen another city, and that's a damn shame. At least, he won't have that regret. The forge is a bit lonelier, but I made a portrait of him to take his place."

"That is actually why I wished to meet with you." The glassblower stifled a sigh, unsurprised. The priest went on: "I have noticed that the city is growing less faithful. Crops are yielding much more these days, trade is improving, and more houses go up every year. But in times of prosperity, people tend to become lazy and do not pay their dues. They begin to believe they don't need the gods that led them to wealth in the first place, and the city loses divine favor. I recently talked to a farmer and found that many aren't even observing the proper rituals before planting!"

"What do you intend to do?" asked the glassblower, bored.

"It is not what I intend to do, it is what I intend you to do. I need a portrait." As the priest spoke, servants brought them their meal. A roasted bird of some kind, carved and slathered with reddish-brown sauce, the crisp skin and juices sizzling on the plate. The master waved his portion off despite its attractiveness. He was friends with too many farmers and cooks to be bribed by food. "It is a great injustice that the spiritual leader of a city should not possess its greatest treasure, an art worthy of the heavens. It seems that the grandness of the temple and the miracles of good fortune have become mundane, and the people need a reminder."

"And what, Your Holiness, have you done to warrant me making one?" The glassblower made sure to strip the honorific of any respect it may have contained before letting it escape his lips.

The priest stared for a couple seconds, unsure of how to respond. "Surely..." he said. "Surely you cannot be serious. I am the mouthpiece of the sun and stars! I made this city what it is! I gave you my *son* to raise!" His voice rose, crescendoing along with the impact of the words he spoke.

"You gave me a child and told me to make him a craftsman. I did so. However, I do not believe he is your son. It is possible that he descends from you and I have no doubt that your wife is his mother. But you are not his father."

Surely he's gone insane from the glass fumes, thought the priest. I didn't know that was possible.

The master continued, "When my apprentice speaks of his home, he does not mention a father. He mentions a mother, and the priest she married, but no father. I suppose that makes sense."

The priest's hands balled up into fists under the table, but he buried his rage and kept a calm demeanor.

"So he has no father? Is that what you mean to tell me? That he isn't my son, he's no one's son?"

"I'm sure most people would identify you as his father, excluding myself. He'd look just like you if all the bread he consumed were not offset by the labors of our craft. The boy will find that useful in life. The title of priest is hereditary, no?"

"Now I see: Power! You want power. You want to shape my son into a tool, so you can roll, blow, forge and color this city until it looks like whatever vision you have for it. You don't want to buy cedar tables, you want the carpenters to bow down and beg you to take them. I was taught from a young age that my most dangerous foe will be my own position, the priesthood being a beacon for those hungry for control."

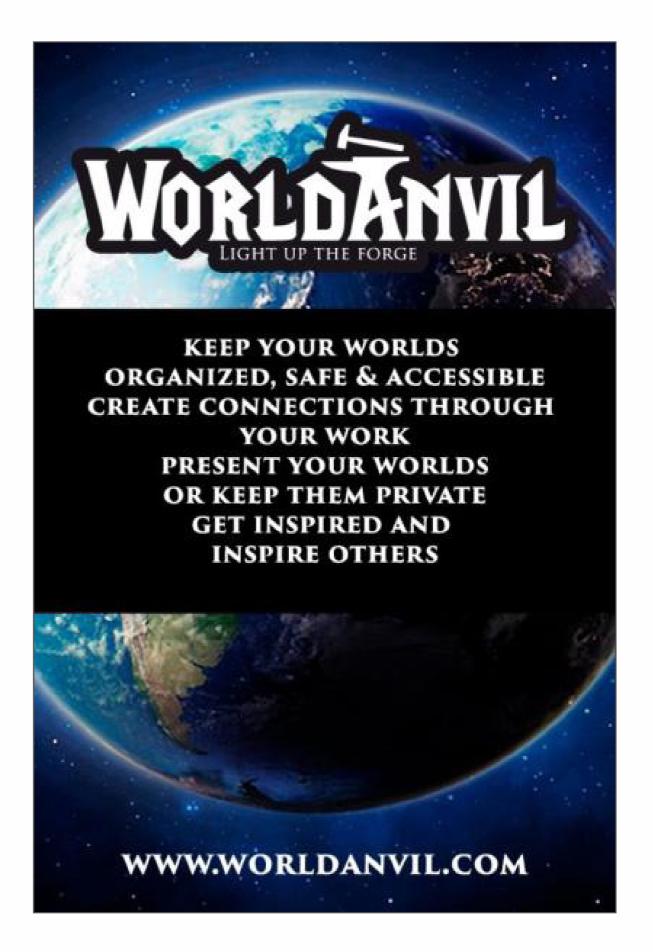
"It is the sign of a failed man that he cannot see anyone's desires but his own," countered the glassblower. "I was taught from a young age that only an idiot keeps both a forge and a flammable table in their home. I don't want a table grown from dirt and piss. I don't want to lord over this city, controlling its people like a child playing with toys. I don't want power, not in the sense that you have it.

"I did want that, once. I spent my time making gifts and trinkets, consolidating favors, and gaining money. I used my talents strategically and rose to prominence in my city. I neglected all things except for work and power. It did pay off, of course. I was given a child to raise, the offspring of a priest. I trained him in my craft and continued gaining allies. The bakers, the merchants, the hunters, one by one they saw the merits in standing by me as

fist-sized balls of colorful glass began to adorn their homes. Many depended on me for the quality of life they now enjoyed." The priest frowned. He could count on one hand the number of times he'd heard the glassblower say so much at once, or with such passion.

"The child grew until he was nearly a man, nearly as skilled as I in our trade. In pursuit of power, I sent him away with merchants, to gain allies in a foreign land in the guise of artistry. Some time after that, I met with the priest.

"We discussed much in our meeting. I told him about my son and his latest adventure But then he made a request of me, an insulting one. He accused me of wanting power, but I did not want power. I already had it"—the priest leaned forward, eyebrows furled—"Anyone he could force to obey him with the threat of damnation, I could convince to do my will by means of favors or money. I didn't need devotees, I had friends in many places. And I don't need a sword, like the one you are grasping in your left hand underneath this cedar table; a shard of glass can accomplish the exact same thing."



EATING HABITS & SOCIAL IMPACTS

Character Development

Culture

Food

Adam Bassett

Worldbuilding has the unique opportunity to be profound even in what are often mundane details, such as eating and drinking. Consider the chocolate frogs from Harry Potter or the Xeno-Iguana from Stargate (which apparently tastes like chicken). Each of these items help the characters learn about the worlds they have been suddenly introduced to and help the audience learn about the cultures in them. Even ordinary items like a strawberry set in a different world can mean a great deal more. When viewing the first episode of the television show Firefly we see a man buy passage with just a small amount of money and some fruit, including a strawberry. From this interaction, and the reaction of the woman who received the berry, we can infer that this common food to us is extremely valuable in the world of Firefly.

The way that we show our characters eat can help inform the audience about who they are, the way they grew up, perhaps even their social status or ability to fit in with the society around them.

The Difference Utensils Can Make

Consider a woman who is eating her meal with a fork and knife, taking bites by cutting her steak with the utensils and taking time to chew each morsel. She takes pauses between bites to interact with another person.

Now consider a man who eats with his hands, oblivious to the fact that he's getting them messy. He does not take his time to chew—he chokes a bit at one point because of this–and he does not stop to acknowledge anybody around him. In fact, he may actively avoid others while he eats; in contrast with others who use utensils (or vice versa) this can show the character as an outsider. However, this example doesn't work as well if the food is supposed to be eaten in a different or unorthodox way, such as how we eat chicken wings!

There was no description of where these two individuals were, what they wore, or anything about them other than their behavior around the food in their possession; but there's a good chance

that your mind began to fill in the blanks. The woman was likely clean, deliberate, and relaxed. Perhaps you pictured her in a dining room, or a dining hall, surrounded by opulence and wealth. Meanwhile the man seemed very hungry, perhaps even starving. He did not use utensils, so either he never grew up with any (Poor? Barbaric?) or he had none available and was hungry enough not to care (Refugee? Lost traveler?). His avoidance of others also suggests that he is protective of his food, whereas the woman didn't have to be.

It takes little time to detail the food or drink that a person is consuming. However, to go the extra mile and describe how they are eating and drinking can provide us with clues about their history or thoughts.

With those earlier examples of the woman and man, consider the opposite. Suddenly the woman is protecting her food and the man is not concerned about losing his. To make that change something would have to have happened in each of their lives to prompt such behavioral changes. Perhaps there was a coup and the woman is left with nothing—maybe the reason the man is now comfortable and well-off is because he lead the coup!

A Great Feast

George R. R. Martin's *A Song of Ice and Fire* makes excellent use of food to further the plot. Throughout the ongoing series, be it in HBO's televised version or in the books, there are numerous feasts held in many of the great halls throughout Westeros and beyond. I would like to focus on the first one we see in the series, the feast at Winterfell in book 1, *A Game of Thrones* (minor spoilers follow until end of this section).

Firstly, it is important to note that the feast of which I'm speaking only occurred because the king and his entourage came to visit the Lord in the North. The banquet was a gesture of welcoming and celebrating the king. Thus, there is a political reason behind this gathering and the vast amount of work put into the feast. By the time it begins,

we are given a great deal of information about the characters, the culture of the Northern and Southern families attending, and glimpses of the way people within each of the two families treat one another.

In the novel A Game of Thrones we get much of the feast shown through the eyes of the bastard Jon Snow. He doesn't do much eating—mostly drinking summerwine, which he discovers he enjoys more than expected. This should be a first clue that he is not comfortable in the setting of a feast. As he describes the great hall and the people in it, he shares his bitterness with the reader. Jon is eager to get in on the gossip those around him are sharing, and quick to slander the visiting southerners This expands on the clue from his drinking; he is particularly discomforted because of the king and those whom he brought. The only things he appears to enjoy at the gathering is the wine, his pet wolf Ghost, and a chance to speak with his Uncle Benjen about joining an order called the Night's Watch. When Benjen asks "Don't you usually eat at the table with your brothers?" Jon replies:

"Most times," Jon answered in a flat voice. "But tonight Lady Stark thought it might give insult to the royal family to seat a bastard among them." (Martin 44)

And there: we have been presented with some information about numerous characters as seen through Jon's eyes—his cynicism toward the king's family and constant drinking giving us some information about Jon—and a bit about the culture of this world that would prefer not to have the lord's family mixing with a bastard son.

All of this hinted at from the start by his take to the wine.

Social Influence

Scenes with meals can be powerful ways to display a person's upbringing and comfort. In

Social Influences on Eating, an article from Current Opinion in Behavioral Sciences, Vol. 9 by Suzanne Higgs and Jason Thomas, we can glean some more information. Their focus is on obesity, but their conclusion may be applied to a variety of other ideas:

"Evidence is accumulating that social influences on eating are powerful and pervasive and that the social context of eating may be an important factor underlying the development and maintenance of obesity."

Consider the fact that their 2 years of research have essentially confirmed that the environment or culture a person is in can cause them to consume differing portion sizes. This is not limited to portion size, but also extends to habits and use of utensils as previously discussed. When creating your own worlds, use this knowledge to inform the way people eat, and how much of it they serve. When detailing your character's interaction with food and drink it is important to do so in the context of the economy and their placement within it. Perhaps like Jon they are ignoring a feast due to their preferences or discomfort. What exactly are they eating, and how are they behaving while eating it? I encourage you to indulge in the culture and let it shine when your characters are eating. Answering questions such as these, even briefly, can provide your audience with a great deal of information.

Sources:

Higgs, Suzanne, and Jason Thomas. "Social Influences on Eating." *Current Opinion in Behavioral Sciences*, vol. 9, 2016, pp. 1–6., doi:10.1016/j. cobeha.2015.10.005.

Martin, George R. R. *A Game Of Thrones: Book One Of A Song Of Ice And Fire*. New York: Bantam Books, 2011, c1996. Print.

INCIDENT REPORT

Explicit

Dystopia

Fiction

Horror/Suspense

M. E. White

The time is 13:38. The occupants of apartment 309 have found camera 309d, the one behind the family beach photo; observation continues from camera 309c in the bonsai planter, providing a view of the occupants from behind at a subtly oblique angle.

"No... No more. Whatever you're trying to pull—"

"You have to listen to me, it just fell. I bumped the photo and it fell, okay? You think I'd set this up? This is crazy."

"Stop it, Ash! You're scaring me. It's not fucking funny this time, okay? It's not."

"I didn't set this up! Look at me, don't you see I'm freaking out too? I mean, this is sick... God, what if there's more of them?"

"Stop! Stop it!"

"Do they watch us all the time? Eating, sleeping, shitting, fucking?" The visibly perspiring face of subject Ashley Piatek, henceforth to be referred to as AP, fills the frame. Close-up on her eye as she peers into, and examines, the camera. Then close-up on her open mouth as she shouts into it: "Perverts!" AP immediately turns around, moving away from the camera. Subject Brianna Williams, henceforth referred to as BW, looks wide-eyed into the camera without getting too close. AP paces in the background, coming in and out of frame. "This is too much. We have to call the landlord. What's the number?"

"It's on the fridge, but Ash..."

Switching to camera 309j, the one in the pantry that had always been locked. AP is seen in the kitchen from slightly above starting to call the landlord's number with her M-phone™. BW enters the frame.

"Ash, maybe we should call the police instead. The landlord, what if he-?"

"Shh, it's ringing."

The phone on my desk rings. I let it ring, adhering to the protocol for such situations. One of the screens on my ten-by-fifteen wall of monitors shows a small group of our operatives approaching apartment 309.

"What's that?" BW backs into the kitchen counter, eyes darting about like startled mice.

"Shh!"

"I think it's someone at the door."

"Go get it then."

"I'm scared."

"Don't get it then, it's fine. C'mere, hon. Still ringing."

One of the operatives on the scene texts me: *Get ready*, timestamp reading 13:45. I hit "#" followed by "2" on the still ringing landline and pick up the receiver.

BW has lodged herself in AP's one-armed embrace. "Maybe there's a rational explanation for this. We have security cameras in the lobby. Maybe this is just another security measure, yeah? To keep us safe? What do you think?"

"I think—hello?—oh, never mind, I guess it's still ringing. Huh. That was strange."

"What?"

"I just imagined it, thought I heard someone there."

I hold my breath.

"Ash, I think... I mean, the cameras in the lobby are out in the open. These were..."

"Hidden, like to spy on us. I know. Hm... Is it normal for it to ring so long without going to

As long as they believed in their memories Moriyama could make them do anything.

voicemail? What even is this? I'm not even on hold, I don't think?"

"Did you ever notice the pinhole in my father's eye?"

"What?"

"In the photograph. In the photograph, I just realized, there's a little hole in my father's eye. For the camera to see through, I guess? I mean it must be."

"I always thought it was part of the picture. Like maybe you put it there."

"No, no this is the first time I've ever even noticed. When did someone come in and do this, Ash? I remember hanging that picture when we first moved in, and there was no camera then, was there?"

"No... No, I—"

"Who's still knocking on the door? Ash, why don't they leave?"

"I don't know—"

"Oh my god, they're going to break the door in like that!"

"Wait, don't—stay here! Brie, come on, you can't—hello?"

I whisper one word into the mouthpiece: "Bonsai."

The phone clatters to the ground.

"The subjects have been returned to their beds," I said, bowing to my superior. This ingratiating

pose put me in licking distance of her shiny black boots, sharp of toe and heel, capable of mashing a face in. Nothing was stopping her from doing so, an intentional reminder of her power and restraint. She was a rumored relative of Moriyama which, if true, made her placement here as overseer of research an extension of his almighty reach. If not, she still possessed undeniable command presence.

Her voice rang out cold, like metal on metal. "Good. The threat has been neutralized. The experiment is safe."

"Is it though? This is the fourth time we've seen this from 309. How do we know they aren't retaining some memory?" Speaking up while in my current posture was ballsy, sure, but my concerns were legitimate.

After all, memory control was the whole point: control memories, control identities, control people. As long as they believed in their memories Moriyama could make them do anything. Even someone as low on the chain as I knew that much. Why else would anyone invest so much time and resources into the study of hypnotic suggestion, once thought pseudoscience? What all this was for, though—the big picture, the point of all this data I collected—I couldn't say. It definitely wasn't for therapeutic reasons. I had a hunch it was for slave labor, but that almost seemed too simple. My superior surely knew but was forbidden to tell me, and I would be dismissed for asking. I glanced up from the floor, straining to see her expression, to see how my inquiry was received.

She laughed without opening her mouth, obscuring painted lips behind painted fingertips. The effect was at once sinister and demure. "Don't be absurd. The next day, it's as if nothing has happened to them. Have an incident report on my desk by tomorrow, and we shall proceed as usual. Rise, and be dismissed."

I had to hurry up so the night shift gal could take over. Thankfully, the report took almost no time at all to compile—the footage was all there, I just had to transcribe it. I even looped the part where the subject shouted into the camera a few times because it was just too funny. "Perverts!" "Perverts!" "Perverts!" I don't know why I found it so funny—maybe because of how strange it was that she had no idea she was addressing me, the kind of power that gave me. Maybe I was a pervert. I laughed at the thought.

Night had fallen by the time I caught the train, exhausted from such an eventful day. My thoughts were left to wander, contemplating trivialities and tired nonsense as I stared blankly out the window, as usual. Vibrantly familiar advertisements for Moriyama electronics, appliances, cars, beauty products, pharmaceuticals, restaurants, and media rolled past. Billboards, stationary and animated, all electronic and aglow, pixels coagulated into bricks of vibrant, mottled light that twinkled like stars behind the rainy windows. This constant stream of information—the speeches, the slogans, the glamourous imagery—had been fed to me again and again with such frequency that I no longer took notice, the same way one is often oblivious to the air even as it is breathed.

On a screen fixed to the back of the seat in front of me an attractive woman dressed superficially like a conductor outlined procedure in a clear, cheerful voice. On the back of every seat, for rows and rows, her emphatic gestures were replicated and synchronized perfectly, except on the odd screen that was slightly off-color or damaged, the image marred by black gashes that forked like burst capillaries. Her voice came down from speakers overhead: "Suspicious behavior includes but is not limited to: the use of contraband items or drugs, wearing one's hair or clothes in a manner that does not comply with city law, the use of language that is disruptive or defamatory in nature, listening to music without the use of headphones, vandalizing train equipment or signage, abandoning items on the train, poor maintenance of hygiene, and visible display of unapproved religious symbols or objects. Children unattended by adults and teenagers out after curfew are always suspicious. Alert train personnel of anything or anyone who arouses suspicion and you could be

compensated for your service. As always, thank you for doing your part and preserving the peace! Next stop: Mercator Station."

"Damn picture's broke!" An old man gave the screen in front of him a hard thwack with the flat of his hand. It sputtered with static.

"Careful, mister," I said in a low voice, a jocular smirk deliberately betraying the irony behind my words. "That sounds like defamatory language to me, not to mention vandalization of train equipment."

His eyebrows knitted together with distress. "What's that?"

A young woman dressed in business attire turned about to face him, kneeling in her seat with her crossed arms slung over the backrest. "That's a new one. Must be about the terrorist bombings last week. Not sure how much it helps anyone, putting the burden on train-goers, but at least the city's doing something." She looked me in the eye, nodding. "Hopefully it's only a temporary measure."

The sound of the sliding door at the end of the aisle distracted me for a moment—a screeching, scraping, metallic sound. Someone had just exited this car for the next one. Onscreen the same woman as before, this time dressed in a feminized facsimile of a military uniform, extolled the virtues of Moriyama's militia, emphasizing the upfront compensation for those over 16 who made the honorable decision to enlist. "Dulce et decorum est... Oh, you know the rest!" The image zoomed in and dozens of her winked in unison. "Next stop: Columbus Station."

"Forgive me," croaked the old man softly, pushing his round spectacles up the thin bridge of his nose. "I'm hard of hearing, I should have sat somewhere else. I need to read lips. Did either of you happen to catch the name of the next station? Was it Edison?"

"Columbus," said the woman sympathetically. "Edison was two back."

"Oh!" His glasses slipped carelessly down his nose again. Keeping them on was a seemingly

Sisyphean task. Perhaps that was why his manner was that of one defeated by fate. "Oh, damn it all!"

"Don't worry, sir." She placed a hand on his shoulder. "My name's Akane. Don't ride the train often, do you?"

"No," he said, visibly shaking. It was a little pathetic, and I looked away with discomfort. "I was visiting my wife in the hospital." Hearing him swallow, I couldn't help but picture the undulations of his elderly neck. I fought against the urge to grimace. "Akane, you say? A Japanese name. My wife is Japanese."

"Don't worry, sir," Akane repeated diligently. "If you like we can get off at Columbus together, I'll help you catch the right train back to Edison."

"Oh, you would really do that? It would be much appreciated, young lady. Akane. Thank you." His voice quavered, as though he were on the verge of tears. How embarrassing to be of that age, to have people treating you like a lost child. I felt vaguely nauseous at the thought of growing old and feeble myself, cringing at the inevitability of it.

That awful scraping sound again, drawing my attention to the open door. Two policemen filled the frame. A third person in a plain yellow shirt, thin face with wispy whiskers sprouting from the upper lip, said something inscrutable while pointing down the aisle. One of the policemen approached the old man and seized him by the shoulders. His spectacles clattered to the floor. "You're coming with me," he intoned with authority.

"Now wait a sec," protested Akane. "He's done nothing wrong!" She struck me with a pleading look. I turned my gaze back out the window, breathing the comfort of bright lights. "You can't do this!" A moist crack, like the splitting of hard earth. Again, and she cried out this time. The train slowed to a stop.

Glancing back I saw only the old man's brown loafers and bony, strangely sockless ankles as he was dragged outside onto the platform at Columbus Station. From the window across the aisle I watched the policeman throw him to the concrete.

He stumbled backwards out of frame, but even as I lost sight of him I still heard the squirming animal noises coming from his mouth. Then the doors shut, and all the sound was sucked out of the scene. The train lurched forward again as I watched the policeman draw back his truncheon in an arc over his head, and then it was over, nothing more to see. We were moving, further and further away with each passing second gone by. The world outside, lost in the rush of air and blur of scenery. He was gone.

Akane had apparently fallen into the gap between rows. Disheveled, limbs splayed out in all directions—her expression one of pure shock, staring disbelieving into space. Blood poured from her nose, coating her lips and splattering her blouse. Her gaping mouth took on the appearance of a shiny wound, wet and red. Out of nowhere sobs suddenly shook her lifeless form and she folded into herself. I watched the high heels slip off her retreating feet as her legs snaked away from the aisle, knees tucking beneath her chin.

The second policeman had disappeared. I saw the thin, rat-faced man pocket something before taking his seat. "Happy holidays from Mr. Moriyama!" That woman was on screen again, this time in a full-body Santa costume, fake beard and all. "Next Stop: Piltdown Station."

I stood up, but before we arrived at my stop a brave idea occurred to me. I walked to the end of the aisle where the man in the yellow shirt was seated. I realized he was pretty young, early twenties at the latest. He looked up at me as I approached and said nothing. I blocked his only way out. I had the upper hand. Up close I could see the sweat stains on the shirt, which was perfect. "Hey, you piece of shit," I said, smiling disingenuously. "You better give me all that filthy money or I'll report you for poor hygiene. Or, by the looks of you, maybe you're out past your curfew? I hope you have your ID on you, kid." He bared his lower teeth with displeasure and let out a breathy groan, but tamely, if reluctantly, handed over the dough.

"Thank you kindly," I said, glancing it over and estimating I had a good twenty moris on my hands. As I exited the train, almost as an afterthought, I added, "Keep your nose clean and your head down if you know what's good. Rats always get stomped

on." As do martyrs, I thought, looking back into the empty window, expecting to see her face. The apathetic glow of fluorescent lights stared back instead, each window like an individual frame on a filmstrip scrolling past with exponential acceleration, slow at first then all at once. The last car passed by and suddenly I felt the oppressive choke of solitude.

I tried to shake it off as I walked home from the station, breathing in the cold night air. I wondered if that rat-faced kid would take that last bit of advice. If he needed the money, the answer was probably no. I should have thought things through more. Now he was probably just going to pick on someone else. Was it worth it, just to line my pockets with a couple dirty moris? He wasn't even the real bad guy, here.

What happened to that old man could have really happened to anyone. Even me. I could have stood up to the police, but would it have made any difference? That pleading look resurfaced in my memory like a bloated corpse in the river. *Could you blame me?*

I made a quick stop at a bodega on the way, exchanged my guilt for some loosies. I wasn't a big smoker because cigarettes were so heavily taxed. It'd been so long since I'd smoked, twenty used to buy a carton. Because of the tariffs, few goods were imported into the city. There was a sort of rebellious novelty to having something that didn't bear the Moriyama brand. It really brought me back, like I was in high school again, blowing my skimpy part-timer's paycheck on cigs and the lotto. I smoked lavishly and with impunity, my conscience as clean as it was going to get.

But, eventually, my thoughts floated back to my work day. Those girls really didn't know anything. How frightening it must be to find a camera in your home, to have your reality suddenly threatened. I thought about the subject... About Brianna, how she remembered hanging up the photograph when moving in, and wondered how it was possible that a camera could have been installed without their knowledge. But the camera had always been there, and she was not the one who hung up that photo.

She remembered hanging it up, she remembered moving in, but memories, like photographs, can be altered.

I turned down the alley, scaring some animal from my garbage, finding my apartment door at the grimy bottom of a flight of steps leading into the building's basement. I felt sure that glowing eyes were watching as I turned my keys. Upon entry I accidentally kicked the empty food bowl that had belonged to the cat. I stared at it for a moment, longingly. Once upon a time, I'd taken in a stray. I missed the companionship but couldn't afford it. The poor animal had paid the price of my loneliness. I decided to use the bowl as an ashtray.

Backpack and coat were shed haphazardly, displacing the dust in a burst around where they fell. I laid myself down onto my bare mattress on the floor but was frustrated in my attempt to sleep by the sounds of what was either copulation or brutal violence between a man and woman on the floor above—at some points it sounded like one, at some points the other. I could have called the police but that was the landlord's apartment, and I feared eviction. So I flicked on the radio, blasted ocean ambiance as loud as I could, and stared at my ceiling.

I thought about that family photograph. How the same one was hung up in apartment 308, and 310, and in all apartments before and after 309 two hundred thousand in total, if you included the other complexes, I believe. Though I was only charged with monitoring fifteen apartments, they were all practically identical and I had no reason to believe the rest would be any different. They all bore that same photograph, across the room from a bonsai planter. It was a stock image. In other words, it was meaningless. Yet, somehow, thousands of people—if you could call them real people, and I think you probably could—looked upon it fondly. That random smiling man was their father. That random woman spreading a towel over the sand was their mother. There was a random boy and two random girls, one of them a toddler, and depending on which of the children they identified with maybe they believed they could recall that day. They might even remember the feel of hot

sand on their feet, or the sound of gulls and the lapping waves.

For one absurd moment I felt something like jealousy, but it made no sense. I, too, had never seen the ocean. But at least I knew the truth of it. Freedom, bitter as it was, was still better than living in a cage of lies. Taking comfort in the truths of my own stable reality, I drifted into sleep, preparing for a new day like every new day: business as usual.

"Bonsai," I snickered dryly to myself.

The time is 13:54. One subject, BW, is staring directly into camera 309d.

"Brie?"

"Oh, sorry."

"What were you looking at?"

"Did you ever notice... There's a hole in the photo. In my dad's right eye."

"Oh, yeah, I always thought you did that."

"Why?"

"I don't know, maybe you did it a long time ago. Did you water the bonsai, by the way?"

Her eye twitches visibly. "Oh, no. I'll do that now."



PROMPTS

It's easy to get stuck, hit writer's block, or overlook small details. We would like to try and combat these troubles by asking questions about your world that you may not have thought of, as well as by offering writing prompts. If you would like to write a short story based on one of the writing prompts, or have a prompt you would like to share with us, please submit it to us at com prompts it to us at contact@worldbuildingmonthly. com or social media. Submitted stories must be based on the following prompts in order to be eligible for reproduction in the next issue.

File Requirements:

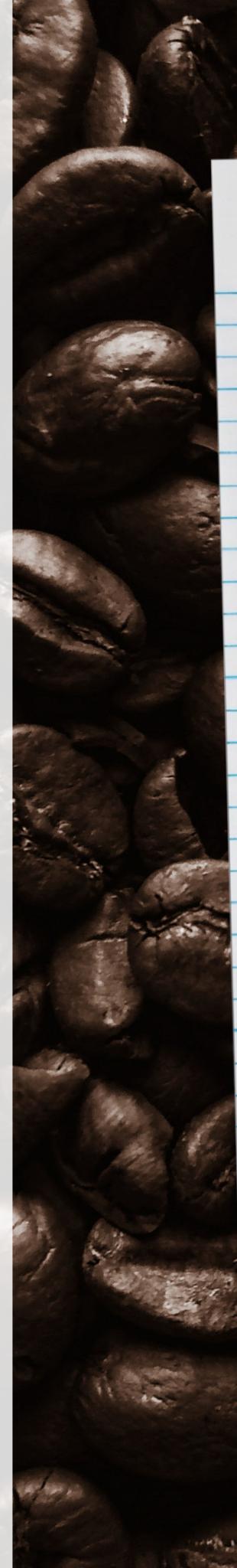
- The file must be no longer than 5,000 words
- The file must include title and author(s)

Worldbuilding Prompts:

- Many people throughout our history have greatly affected the world around them despite sometimes being utterly insane: Nikola Tesla, Vincent Van Gogh, Empedolces of Akragas... Who are your world's most influential people?
- Does your world have an invasive species of plant or animal? If so, where did they come from? How did they function in their original ecosystem and what is their function in the new one?
- Are any foods considered taboo?
- What kind of jokes will your characters throw at each other while resting at the inn? Credit to Szaal from the World Anvil Discord server. If you're looking for more, find them here!

Writing Prompts:

- Tell a story about a war in your world from the point of view of a villain.
- A casual dinner with a co-worker turns into a backstabbing murder when one discovers the other holds sensitive documents. Now that murderer must smuggle these documents back.
- Thunder bellowed overhead, muffling the sounds their feet made in the mire, repeating like heavy drums as they approached their quarry.
- Heavy bass beats shook the stadium, the audience's cheers and screams drowned out the singers. He waited patiently, watching the light show. When he saw the flames-the crowd shouted in excitement from the sudden burst of fire—he donned his mask and walked in the other direction.



Ribeni Vine Fry

StronglyOPlatypus

Ribeni cuisine is typically thought of as dull and bland due to the inherent limitations the city is subject to. Such opinions were fact, and vine fry is no exception. This is the one known version of the dish that foreigners find palatable.

Ingredients:

Most choose to use other vegetables when they can find them, skipping most of the complicated preparation. Eating a vine when there is other food available is the pinnacle of insanity.

- One 6 to 10 inch section of cordano vine stem
- Rendered vine fat (If by the mercy of the stars you have oil or butter please use that instead of this vile product.
- All of your chicken or fish If you have too much for the dish thousands of Ribeni
- Spices: any you can find <
- Apple chunks
- Cream Should you be so lucky.
- Fruit juice or pulp

Peppercorns, herbs, spice-pods from the surrounding forest, and salt are the ones most Ribeni choose to spend their money on. Cheap and available, they help distract from the foulness of the vine.

Place a pan on a ripping hot fire and melt the fat. Take the skin off of the vine stem and rub in your spices, then fry it on all sides until nearly burnt; or burn it, it might help mask the stinging, bitter-sour vine flavor. Cut the cooked vine into small cubes and set aside.

Add your meat to the pan in small pieces, roughly the size of the vine cubes, and brown for a few minutes on all sides. Do the same to the apple. Add as much of these ingredients as you have. If the vine constitutes more than two thirds of the fry, you will have to eat with fortitude, method, and strategy to get through the meal with your stomach and sanity intact. Stir all ingredients together with the vine oubes, then add the cream and juice. Now eat, and maybe you will understand the plight of the star-forsaken city for which this is the pinnacle of cuisine.

RESOURCES ON FOOD

Culture

Food

Review

Bokai

Humanity sure does love food. We write about it, talk about it, travel for it, experiment with it, and are obligated to spend a certain potion of every day consuming it, so it makes sense that food is a topic where the worldbuilder can find a plethora of resources to study and apply to their projects. There are almost too many options, but here are a few resources that we've found particularly useful.

Raja Rasoi Aur Anya Kahaniyan (Kings, Kitchens, and Their Stories)

A two-season series available on Netflix and the Indian EPIC channel, *Raja Rasoi Aur Anya Kahaniyan* is on its surface a standard regional food show. However, the reason why we suggest this series over all the thousands of regional food series out there is three fold. First, each episode does an excellent job of digging deep into the context behind they cuisine they present. It often starts

with geologic changes that occurred over millions of years, establishing the specific conditions that allowed for one or another sort of produce to thrive, then works up to historical influences like political or religious shifts, changes in cultural norms, or the effect that the tastes of particular *Rajas* had on the food that was eaten in their court. For example, one learns that paneer, a staple of some Indian cuisines, was once considered sacrilegious due to the sacredness of milk and the symbolic desecration of curdling it.

Second, the series draws directly from historical accounts and presents citations from contemporary sources; a portion of one episode is even dedicated to showing off a palace's archives and its centuries old records. Knowing how historical people spoke about the food in their lives is a good reference for how to make characters in your world approach their own cuisine.



And third, the series is a closer look at a region that is not as commonly highlighted in the world-building coming out of the West. It digs deep into a culture that is usually thought of as a monolith, and highlights a level of diversity within the country that is important to keep in mind whenever you are working on your own projects. Being able to look so closely at a single country allows you to see the differences and similarities in regions like Himachal Pradesh, Sikkim, and Tamil Nadu, as well as how they have influenced each other over the years.

Anthony Bourdain

Bourdain has done a number of travel series now, with each successive title focusing less and less on the food and more on the places where the food was made. If Raja Rasoi Aur Anya Kahaniyan is about the way the culture and environment shapes the food, Bourdain's shows focus on the ways that food affects culture and the people who eat it. These shows are suggested as a window to how society works around its food: when people eat, where, with whom, and so on. While his shows do look at high end dining and highlight some very expensive fare, along with the people who might eat them, he also spends a lot of time among the people on the street, providing a good contrast to the focus on nobility that Raja Rasoi Aur Anya Kahaniyan has.

Bourdain has made many series, but the two that we would suggest first are The Layover and Parts Unknown. The first tends to represent a whirlwind tour of a single locale and has more of a tourism guide feel. Watching an episode is a good way to get a sense of how the energy of a place can be interpreted through its food culture. Bourdain's latest and most insightful series is Parts Unknown, a show that pulls away from the food more than any of his other projects to take a deep dive into different cities, regions, and countries, often with a focus on their political situation and the culture of their people. The focus always manages to make its way back to food, though, and if you're looking to find some inspiration for more interesting and unusual dishes this show may give you some ideas. And, if you aren't in the mood for sitting down to some forty minutes of TV at a time, *Parts Unknown* has a <u>website</u> with essays and clips about each location visited.

Salt and Cod

Salt, a World History and Cod: a Biography of the Fish that Changed the World are both books by Mark Kurlansky that attempt to track the historical importance of their eponymous ingredients. Salt is an essential element in human nutrition, and control of and access to it has been an important concern since the dawn of civilization. Knowing just how the struggle for access to salt played out in this world can help you work out the details for how a similar food resource can affect your own civilizations. Cod, a similar book, focuses on a commodity that, while not as essential, has still had an incredible influence on our civilization.

Both of these books are in a genre known as microhistory, which examines the history of a single detail in depth. Asking yourself how much you can elaborate on a similar detail in your world—such as a particular sort of meal or food resource—instead of coming up with broad information and stopping there can create opportunities for finding new avenues in your worldbuilding projects.

Binging with Babish

Binging with Babish is a Youtube sensation who runs a weekly cooking series with a twist; all of the recipes come from works of fiction. If you're thinking about trying to make some real, edible food from your own world, this series can help you bring your ideas to life. Even if you aren't much a fan of cooking, taking a look at the variety of sources from which Babish draws his inspiration could help you come up with ideas for your own world's cuisine.

Townsends

While Binging with Babish takes outlandish recipes and creates them in a modern kitchen, Townsends

takes traditional meals and demonstrates how to make them using antiquated methods. The channel focuses on food from the 18th century so watching a few videos can give you examples of pre-modern cooking methods, including some information on the history of cooking in the West, particularly England and Colonial America. The host demonstrates cooking over open fires, building earthen ovens, and even has a video comparing modern kitchens to 18th century ones.

It's my belief that one of the best ways of infusing a project with new ideas is to draw inspiration from a large quantity and variety of sources. Here are some things to think about when applying the information from the above sources to your own world.

Staple Foods

Staple foods are foods that constitute a dominant portion of a culture's diet and are eaten with regularity. Almost every region will have at least one of these, usually a starchy product that is easy to grow, can be kept unspoiled for a relatively long period of time, and can be found in many if not most of the dishes in a region. The properties of that staple food may decide the way the rest of the cuisine develops around it, since cooks will work around the limitations of a staple food to created basic meals. Compare rice, which can be eaten as a whole grain or pounded into a sticky paste; wheat, which often must be milled into flour and then processed; and potatoes, which can be boiled, mashed, stuck in a stew, and so on. To read more about the particular staple of wheat—and the bread products that are made out of it—see the article *How* Long Should Bread Dough Rise on page 24 in this issue of Worldbuilding Magazine.

Food and Ownership

Who produces the food and who owns it? These two groups are often different people. Think of systems like slavery, feudalism, and even modern day large-scale agriculture; in each of these cases those who do the work and those who are entitled to the finished product are not the same. Knowing who controls the food will often tell you who holds political power.

Food and Status

Certain foods are often associated with different levels of social status, as are certain eating habits. If we consider the sort of person that comes to mind when we think about caviar they are probably not the same sort of person who we'd envision eating at McDonalds. Here's another example—in the movie Seven Samurai desperate farmers try to buy the service of samurai with bundles of rice, while they themselves resort to eating millet, indicating to the audience their destitute and pitiful state. These are just two examples of how what we eat can say something about who we are. Society also unevenly distributes status to people who cook in different contexts; consider the different connotations between "cook" and "chef." The first may be an anonymous mother of 2 making dinner for the family, while the other may be a 3 star Michelin rockstar who's artistry has inspired books and television episodes.

Food and Taboo

What can or cannot be eaten is often a matter of social norms. Sometimes those norms are benign and breaking them leads to little more than disgust. Sometimes the taboo is more strict and violation can be illegal or result in severe punishment. Knowing what is considered edible by your people and why help you understand their relationship with a whole slew of religious, political, scientific, and social issues. Common sources of taboo are concerns over sanitation or disease (pigs to Muslims), the sacred nature of certain plants or animals (cows to Hindus), and feelings of affection that bar us from viewing certain things as food (dogs in a majority of the world).

Once you have a good idea of how food interacts with the rest of your setting you'll be able to use this information to augment every adjacent subject. It can be used to make connections between otherwise disparate topics, or employed as a shorthand to indicate an individual's place in society. If you haven't already, try thinking about the food in your world and the many ways in which it is important to civilization.

1. Legal Pau

Travelers Pie from the Chicago uNoah Guy Commonwealth

THE DE

This is a Traveler's Pie from the Chicago Commonwealth, a State in the Reformed States of America — a federal constitutional monarchy. Based on the old tradition of deep dish pizza in the city the Traveler's Pie takes it to the max. Often wrapped up in cloth and chilled it is given to travelers on the way out of the city as a parting gift to be eaten within the day. It is very filling and full of carbs, and the city is famous for it.

During the early days, after the apocalypse that ended the Modern Era, this was an alternative to a regular deep-dish pizza for people who would walk between the Free and Sovereign City of Federal Chicago and the Free State of Kennedy, or other settlements. Once Chicago was conquered by the Reformed States of America through the Great Chicago Arson of 2032 AD, this dish became really popular for people leaving the burning husk of the city to find other settlements.

Travelers Pie is an extreme version of Chicago style deep dish pizza made popular by the chef Leonardo LeBadalementi, who would experiment with classic Chicago cuisine to make it more portable in an age where refrigeration was rare.

Curian Funnel Cakes

Imachinate

Curian funnel cakes are an oil-fried pastry originating from the kingdom of Conais in Southwest Varia. They are considered a local delicacy in the country and are served for all manners of occasion. The variations in the ways one can serve Curian funnel cakes has made it a "food for all classes." Paired with fruit or confections Curian funnel cakes can serve as a dessert, while it has also been known to be eaten with flavored meats for snack or meals. The first documented appearance of the funnel cake occurred during the first Faenrul Festival in Curieux. Since that time it has become a staple food of Curian cuisine, particularly visible during the funnel cake recipe contest during the yearly Faenrul Festival. It is widely regarded as one of Conais's most popular desserts, even to foreigners, drawing thousands of travelers to funnel cake serving establishments each year.

To prepare a Curian funnel cake one must mix a batch of frying batter comprised of flour, eggs, milk, salt, and baking powder. Sugar is often added when preparing it as a dessert, though not required. After thoroughly mixing the batter one uses a funnel or a similarly shaped tool to pour the mixture into a container of hot, boiling oil. They are fried until golden brown before being removed and drained of excess oil. Funnel cakes can be served plain, though toppings prove a far more popular option. As desserts the most common toppings include sugar, caramel, chocolate sauce, and fruits. For snacking or as part of the main course of a meal Curian funnel cakes may be combined with salts, spices, and cheeses.

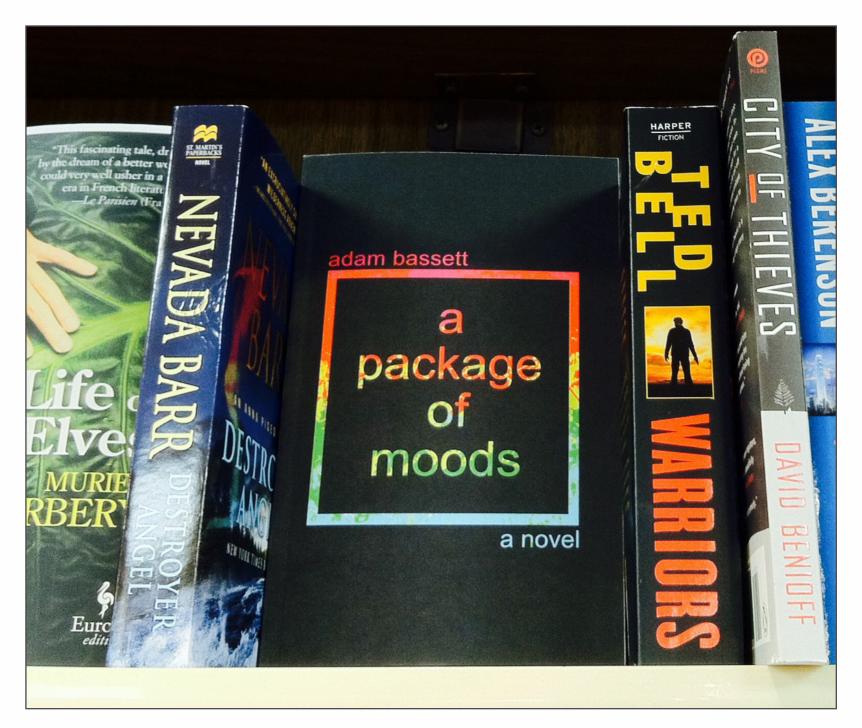
CONTRIBUTOR SPOTLIGHT

Dear Reader,

We would like to have a more personal relationship with you. We've already opened up our Discord server to public use, where you can meet and chat with any of us, but in addition we decided it would be nice to toss a little something here in the magazine as well. I've been asked to start, so I'll just hop right in.

My name's Adam Bassett.

I'm an advertising salesperson,
author, and graphic designer. I was
attracted to the magazine when
the first issue was announced, but
never got the chance to participate since the third issue. Since
then I've created art, edited, and/
or written for every issue. A few
months ago I was made the chair



of the writing department, and have been looking for ways to make the magazine more exciting. For example, I had a hand in getting us to start publishing short stories, art features, but a lot of the work comes simply in trying to organize everything.

When I'm not at work or helping develop the next few issues of this magazine, I'm often promoting my short story collection set in modern-day A Package of Moods or developing my world for a new industrial fantasy novel about 2 years in the making. The fantasy world is set in a pseudo-1900's fictional world where sorcery has finally found it's match with the advent of modern firearms. The major work in progress follows some of this theme, focusing primarily on a black market trade and revolutionary ideals.

You can read more about either book on www.adamcbassett.com.

Finally, I thank you for reading this issue of Worldbuilding Magazine. This is a passion project, and you all make it so worth it. Please, give us a visit on Discord or drop us a comment wherever you found this issue.

Thank you for your time, and happy worldbuilding!

ISSUE CONTRIBUTORS

UNoahGuy — Editor-in-ChiefLordHenry — Vice Editor-in-Chief

Adam Bassett — Writing Department ChairBH Pierce — Writing Department Deputy Chair

Ike Riva — Editorial Department Chair
 Strongly_O_Platypus — Editorial Department Deputy Chair
 Brotatofarm — Editorial Department Deputy Chair

Wynter — Art Department ChairWithBestIntentions — Art Department Deputy Chair

Debug200 — Meta Department Chair

Alex L. — Editor
Asanouta — Editor
Bokai — Editor
Cryssalia — Writer
Eggtato — Editor
Hexarch — Writer
Imachinate — Writer/Editor
Madoor — Writer
Mick Gadaleta — Editor
S6th — Editor
Tristen Fekete — Artist/Cover/Layout

