Four Facts About Whisky Casks Distillers Don't Want You to Know

"All casks are different." This a commonplace and it's one of the basic rules all aspiring maltheads and apprentice whisky anoraks will learn rather early on after they have started their journey into the whisky wonderland. When you take the step from standard distillery expressions to single cask whiskies mainly bottled by independents you will discover a seemingly endless variety of malts that sometimes can have very different characteristics, even if they are made in the same distillery.

In this E-pistle I would like to highlight a few aspects of whisky casks that for some strange reason do not get very much attention, even though their consequences are rather significant.

1. Seaweed? What Seaweed?

Tasting notes of Islay malts usually feature descriptors like “seaweed”, “sea spray”, “Atlantic jetty” or the likes. We all know that Islay is both caressed and mistreated by the powers of the Irish Sea, so in a way it is not a surprise that we can find maritime flavours in Islay whisky. The surprise only comes after we have learned that some Islay whisky isn't even matured on the island itself but on the Scottish mainland.

All of Caol Ila and part of Lagavulin is filled not into casks but into big tank lorries at the distilleries that can be watched rolling onto the Islay Ferry from Port Ellen or Port Askaig to Kennacraig on a daily basis. And this is not different with Talisker from the Isle of Skye.

But nonetheless we can taste the maritime influence in these whiskies. Is this mere psychology? Is it wishful thinking or even a mild form of hallucination? I don't think so.

Even if the picturesque concept of ocean waves splashing over whisky casks and frothy spray being driven through the ancient dunnage warehouses by the by the Atlantic gales is just a myth, the maritime flavours are certainly present. The answer to this mystery is surprisingly easy: Peat.
Maritime flavours are almost directly associated with peated whisky. The Islay distilleries use local peat that has collected the goodness the Islay climate for many centuries. The concentrated remains of decaying plants are in my opinion the strongest contributor to the maritime taste profiles of Islay malts.

And there is another little fact that points into the same direction. In Andrew Jefford’s book about Islay (Peat, Smoke and Spirit) there is a passage stating that Bruichladdich's Octomore wasn't made with peated malt from Islay. The malt was supplied by Bairds Malt in Inverness who at that time supposedly were the only ones who could provide the phenol level required for this malt.

I had tasted the Octomore 2 before I read the book, and I was surprised to find a rather “clean” peatiness in it that was lacking the typical seaweed character you would expect from an Islay peat monster. But mainland peat is by far not as exposed to maritime weather conditions as Islay peat, that's for sure.

I won’t deny that there also may be a small direct influence of maritime air on whisky maturing in Islay warehouses. Bruichladdich for example claim that decaying algae on the shallow foreshore of their seafront warehouse will flavour the air with the gases they produce. But I don't really think an effect like that can be result in more than a fraction of what the peat is adding to the flavour. And if you taste unpeated Laddies, the maritime character is far from being overwhelming.

2. Don't Distilleries Care About Their Bourbon Casks?

Scotch Whisky has traditionally been matured in either used sherry or bourbon casks. Now we know that there is quite a wide variety of sherry, from the light and dry Finos or Manzanillas over the richer Olorosos to the thick and sweet Pedro Ximenez varieties. Obviously it makes a difference for the whisky which style of sherry was previously contained in the cask. This is why sometimes - but unfortunately not always - the type of sherry is specifically mentioned on the bottle.

But most whisky is matured in bourbon casks. Now what about cask provenance there? Maybe the bandwidth of styles is not quite as wide with bourbon as it is with sherry, but there is a big variety anyway. Wouldn't you think it should make a difference if a cask contained Jim Beam White Label or George T. Stagg before? When I visited Laphroaig I saw a true hodge-podge of different casks on the distillery grounds. To be honest, I don't know how careful distilleries are in selecting bourbon casks. But I can tell you that I have never ever seen a bottle that stated any kind of origin, not even on expensive single cask first fill bourbon bottlings.
3. Refill Does Not Equal Refill

The Scottish have the reputation of being very tight with their money, and this is probably why they invented this whole used cask business in the first place. They even took it a step further by re-using their old casks after bottling, and they do it more than once. There are many single casks bottlings that state something like "refill sherry butt" or "refill bourbon hogshead". For refill casks the provenance factor just described will have worn off, but does this really mean that all refill casks of the same type are comparable?

Certainly not. A cask that only housed malt for a cheap blend for three years will still have quite a bit of woody goodness to chew on for the refill spirit. But a cask that previously contained a 25 year old whisky will have worn off quite bit and will very probably be less active than even the 3rd refill of said 3yo, even taking into account that new spirit has a higher potential to leech wood components from the casks. But do we ever get to know any details about the refills?

And it's not just the wood that matters with a refill cask, it's also the whisky. That 25 year old cask will be pretty useless wood-wise but it may well contain a nice amount of decent 25 year old whisky soaked into the staves. On the other hand, the 3yo blend cask may still have decent wood but the whisky within the walls will be nothing to write home about. Refills draw its characteristics not only from the cask wood but also from the whisky of the previous fill. Actually this is not different from first fill casks in any way..

And the whisky in the wood of empty refill casks takes us straight to

4. The Wonders of Cross Distillery Refills

So far I assumed all refills to take place in the same distillery. But if you look a little closer on casking policies you will notice that this is only part of the story. Some distilleries like Bowmore or Laphroaig proudly tell us that they only use first fill casks. So far so good.

But what do they do with them after bottling? Do they burn them to heat the stills? No, the times of direct firing are gone forever. Do they chop them down and sell them as whisky soaked wood chips to add some flavour to your barbeque? Only Jack Daniel's do this to my knowledge (In fact's that's a pretty cool idea. Hint, hint, wink, wink, nudge, nudge!). No, they sell their old casks to other distilleries (or may given them away for free if they belong to the same conglomerate) as they will happily tell you on their visitor tours, because there are also distilleries that strongly rely on refill casks.

For an example, let's look at Caol Ila. The tour guide there told me that the distillery was using refill casks only. I don't know if this really means 100.00% as they may have tucked away some experimental or one-off first fill casks for events like Feis Ile. But it is obvious that they need to have sources for their casks. Spirit to be used for single malt bottlings will presumably be filled into casks from Lagavulin or Talisker because of the similarities of style. The whisky for blends might mature in casks from anywhere in the vast Diageo empire. Perhaps Linkwood, perhaps Glen Elgin, perhaps Glen Spey, who knows for sure?
The casking for Caol Ila is done at a central location on the Scottish mainland anyway where they have free access to the huge Diageo cask pool. And when the malt finally ends up in a bottle of Johnnie Walker the origin of the cask doesn’t really matter anyway. So far this is nothing really exciting, I admit. But just take the time and think a while about what is happening when a cask from another distillery is used for a refill. Just like in a first fill cask, during maturation the old whisky from distillery A hidden in the cask wood will slowly mix with the fresh whisky from distillery B.

Let's do a quick calculation to get an estimate of how much whisky A there might be within the cask wood. We can approximate a bourbon barrel by a cylinder of 0.5m diameter and 1m length. It has a volume of 196 litres and a surface of 2.36 square metres. Assuming a stave thickness of 2cm, the volume of the cask wood (not the interior) is 47 litres.

The whisky can both fill the pores of the wood or soak into its fibres causing them to swell. Wood porosity is generally pretty low, only a single digit percentage. But the wood fibres can hold a lot of liquid, so that the total amount in the cask wood can be as high as several litres. Canadian distilleries have been known to re-char used bourbon barrels in order to get rid of the bourbon in the wood by evaporation as its influence on the taste of the Canadian whisky is regarded as too strong.

And this is where things really get whacky. Back to Whisky Basics: What do we get if we mix malts from two different distilleries? Yes, you are right: a Blended Malt, previously known as Vatted Malt.

**Technically, every refill cask that comes from a different distillery results in a blended malt!**

Let's have some fun and do a thought experiment in the tradition of Mr. Einstein. Take an empty cask of Lagavulin 16, fill it with Caol Ila new spirit and let it rest for three years on Scottish soil. Your patience will be rewarded with a perfectly legal cask of Caol Ila Single Islay Malt Scotch Whisky that happens to contain several bottles worth of Lagavulin 16.

Now imagine a first fill cask of Caol Ila Single Islay Malt Scotch Whisky. After three years of maturation, open a bottle of Lagavulin 16, fill a pipette with it and release a single drop into the cask through the open bunghole. Poof! The Single Malt status according to SWA regulations instantly vanishes in an imaginary puff of blue smoke, accompanied by the diabolic laughter of the Diageo Board of Directors Choir echoing from the distance. To bottle this cask you are now forced to come up with a fantasy name like "Smoky Blues", "Pride of Kilmarnock" or "Serf of the Isles".

This procedure is called teaspooning, even though technically using an entire teaspoon is already overkill. And exactly this is done on purpose by distilleries who want to make sure that none of their casks will end up as an independent bottling with their distillery name written on the label.

Now which cask of the two would rather deserve to be labeled "Single Malt"? Absurd theatre, the Scotch way.
Conclusion

There are a few other logical consequences of the facts I just pointed out:

1. Refill casks are reputed to reflect the distillery "house style" more accurately than first fill casks because of the strongly reduced influence of the previous cask content. This is certainly true for single distillery refills. But cross distillery refills can't reflect 100% house style by definition.

2. Distilleries that don't care much about their casking for blending purposes will show a wide variation of styles (and also quality to a certain extent) in independent single cask bottlings. The reason for this is that the large pool of casks under the control of blenders and brokers is one of the main sources for independent bottlers.

3. For the same reason, many of the undisclosed bastard malts are so difficult to attribute to a specific distillery. The casks used for these whiskies are just too diverse to hint to the distillery bottlings where casks are selected according to a certain recipe. This affects bottom shelf supermarket brands just as much as high quality malts.

As we can see, in addition to the legal shenanigans of section 4 the influence of casks on the maturation of whisky can not be overestimated. The closer you look at it, the more complex it gets. And this does not only mean the chemical and physical processes going on during maturation. This is a topic that I haven't touched here at all because in the archives you will find plenty of E-pistles dealing with exactly this. No, just looking at the way casks are handled by distilleries can provide pretty interesting insights as well.

Footnote: The mentions of brand or distillery names in this E-pistle are purely demonstrational. They may be replaced by your favourite brand or distillery names without any harm to the underlying concept.

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