# Doodles & Drawings

## – an introduction to zero art asset mapmaking through faux aquarelle in Campaign Cartographer 3

*A while back, it was suggested that I write an article about the train of thought and process of using Campaign Cartographer in what has to be among the least time-efficient ways possible. That is, using it to the best of my abilities. Not too long after, there was also a request for a tutorial being made and while a completely different script was already in the making for the first article, I figured I might as well splice thoughts and ideas. Then, a third request for popping the hood of my faux hand-drawn endeavours prompted yet another consideration of focus and approach and – would you believe it – a third iteration seemed more appropriate after all.*

*Anyway, here is the rather lengthy introduction. Don't worry: there will also be some kind-of-technical stuff further down the line. And that stuff is going to be rather lengthy as well, I guess.*

## A quick detour with that train, if you will

My grasp of vector graphics encompasses that it has to do with plotting nodes in a co-ordinate system between which shapes are drawn – by the software – according to technical specifications. That is to say no editing of colours with a paintbrush emulating tool, making a line of pixels look like – well – a line made by said imaginary paintbrush; just two nodes between which the software does the rest.

Between those technical specifications and a whole bunch of placeable objects (symbols, that is), Campaign Cartographer offers some rather powerful tools to design maps for an artistically challenged individual such as myself.

Because actual painting, on the other hand, as a form of visual art requires some degree of understanding how to apply paint and colour on a surface to achieve a sought-after visual representation. There are different types of paint which will have their own unique chemical/physical qualities which inform the style or physical technique of painting itself. Not to mention the fabric of the canvas and properties of the brush or whatever the method of application is…

**NONE OF WHICH WE NEED TO WORRY ABOUT, INCIDENTALLY**

In our CAD environment we can focus entirely on design *composition* if we wanted to. Because we have access to readily available styles – prefabricated means of colour application, if you will.

Yes, we have to get past the "how" to apply these nodes and define the borders of these shapes we use. But the quality of the work comes down to whether or not we put stuff in the "right" places. The rest is really just technical specifications at work – execution of shape, colour, and effects etc. And by quality, I mean of course the extent to which the end result corresponds with our *intent* and *ambitions*.

There is absolutely a common ground with regards to aesthetics where we can sort of pretend to approximate the objectively splendid-looking. There is also, undeniably, a wealth of scientific disciplines to draw from with regards to what makes sense in a map. The entire discussion about the Mordor mountain ranges, for instance, is nothing short of fantastic: we can enjoy some very sound arguments there - both for *and* against said imaginary mountains as credible geological phenomena.

On the other hand, the Mordor mountain ranges came into being as the result of spirits singing songs. Ultimately, there is the crayons-and-beer grade quality to the Bayeux Tapestry – but there is also that side of the Bayeux napkin that is *what it represents*. The meaning we give it in the context we look at or use it. What it invokes.

That being said, if I have the style package and *intent* to recreate something like the *Bayeux* or *Tabula Peutingeriana* but end up short of that template – I very much objectively have failed.

So, it is – in a sense – absolutely possible to objectively fail even with art. And it is in that failure, or ability to fail – and make mistakes – which Campaign Cartographer really is showing off its strength in my opinion. Because even if there is a template, we can deviate from it – if not outright discard most of it – if we wanted to. To my understanding, far from all dedicated map-making software offer this level of flexibility.

But enough with the sales-pitch already: for all the convenience the style templates bring to the table, they are just samples of what we *can* do – more so than instructions for what we *have to* do.

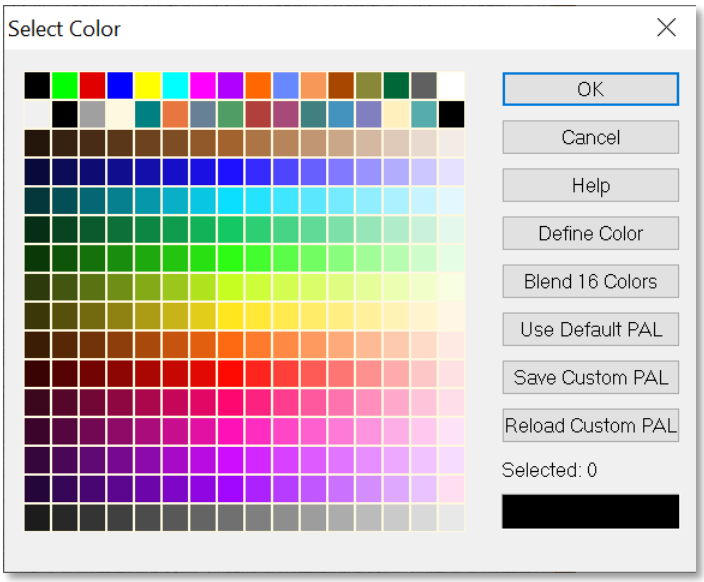
Making maps to the best of *my* ability essentially means, then, that I use Campaign Cartographer within the permitted level of failure. And – seeing as the sky is apparently the limit – therein of course lies the loss of speed that can be attributed to not relying on symbols or dedicated textures for making maps. And I don't mind: however time-consuming, trial and error is just a more efficient way to spell *potential for personal development*.

Very well – this was the grand tour of what I understand Campaign Cartographer to *be*. We're arrived at the central station. Let's grab a connecting train and see what it can allow us to *do*!

## Part 1: Packing

There is a guide out there for the purpose of creating a custom style wizard already, and I strongly suggest that you do read Ralf's article on the subject matter. While such a custom environment is in fact being created in writing it, *this* article is itself not going to dwell too much on the logistics and practicalities with regards to *how* that is done – merely its contents.

So, what will it contain? Well, I need to establish a few things for this faux hand-drawn trip – specifically: *how* am I to apply colour on what *surface*?




*Select colour: this project was almost completed before it started!*

Well, I want to be able to make things appear sketch-like and also looking like it was drawn with an ink pen – and I also want to colourize with a paintbrush. Sort of.

And I guess I want it all to come together on what appears to be a piece of paper canvas.

*Fantastic! Colours are already there, after all.*

In reality, of course, no brushes or pens are readily available so these need to be defined within Campaign Cartographer somehow.

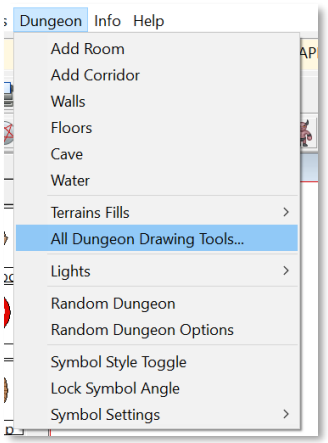
To that end, Campaign Cartographer gives us **Drawing Tools, Sheets,** and **Layers**. And, I know what you might be thinking: *You said we wouldn't be drawing anything!* And that remains true: the drawing is ever only being done by the software.

Anyway! With these three, I can formulate a plan or structure of sorts. A packing list, if you will, the core philosophy of which is "the lighter, the better".

And by lighter, I mean keeping the number of DRAWING TOOLS to a necessary minimum. The exact mileage will vary with each prefab style package, but a two-digit set seems more or less the gold standard. And for very good reasons.

Single-purpose tools have tremendous value for speed of work in an environment which relies on any measure of elaborate structure or combinations of textures of any kind etc. In other words: *this is the grass texture, and this is the tool which applies it in its designated sheet - where the appropriate effects will allow it to do its visual thing as intended within the larger context of other shapes in other sheets and, also, symbols.* And so on and so forth.

At the core, of course, any tool is just a means of defining boundaries of a particular shape: a circle or ellipse, a smooth polygon, a line etc. And this means I will just need a handful of them: something to do sketch and ink lines, and colour fields respectively. Hence the light travel bag.



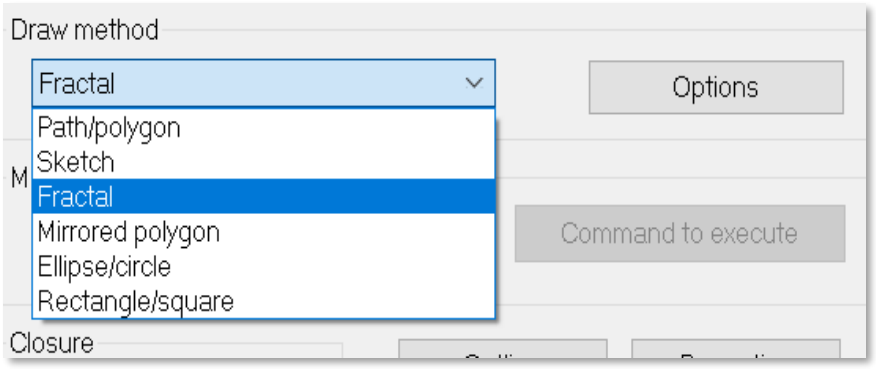

*Dungeon, City, Overland; all tools are essentially the same*

So, this is probably a good time to briefly reiterate the very basics [Sic!] of the *Advanced* section under drawing tools selection, as I think it will make more sense – to the newer user – of what follows.

In defining a custom DRAWING TOOL, you essentially instruct the software what shapes to draw between NODES and also how to draw them. Colour, fill style, line width – even outlining – can all be given a custom default setting to speed things up. Furthermore, you can instruct the tool to put the shape in a default SHEET and/or LAYER – giving the aforementioned outlining a similar treatment. The *Grass Tool* is not just what, but also where.

The shapes at our disposal are defined as the **DRAW METHOD** and **OPTIONS** of the tool, between which we get to cover pretty much all the default tools – only with a wealth of customization options for quick access set-ups.

*Default tools: getting the job done, in 12 buttons and some right-clicks*

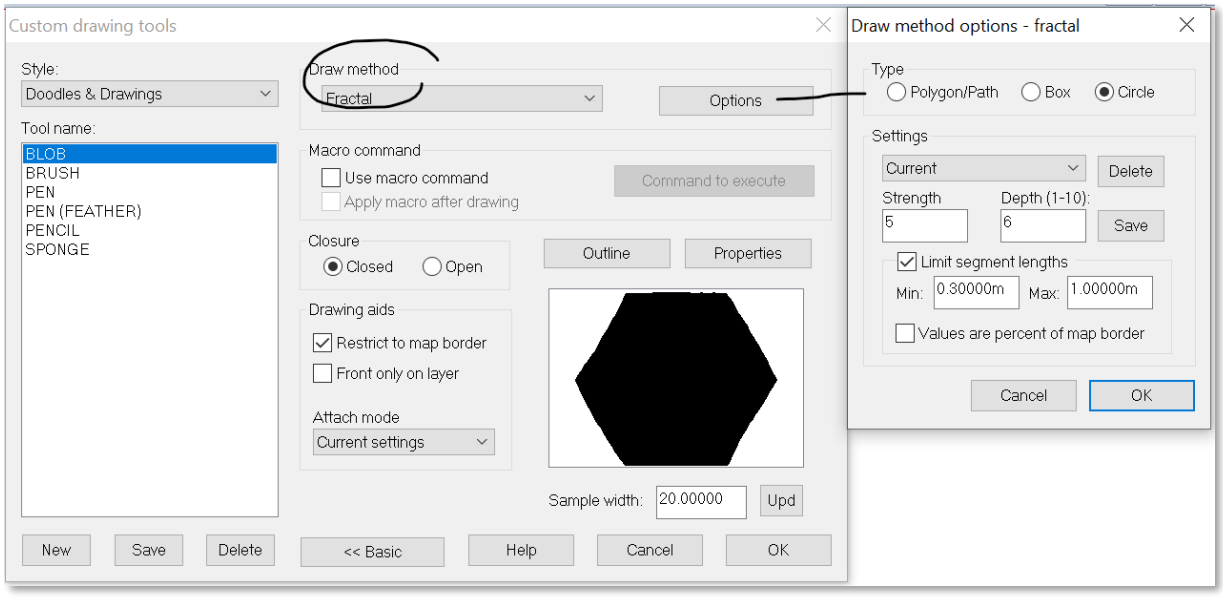



*Kind of like a cocktail-mixing minigame*

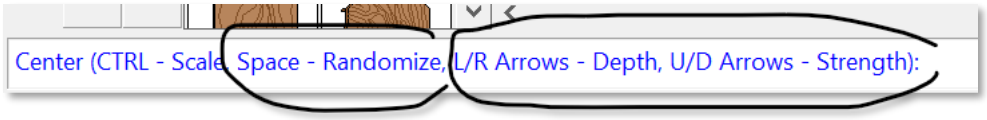
## Part 2: The Tools

Choo choo! I decide to go with the following basic set-ups. Oh, and lest I forget:

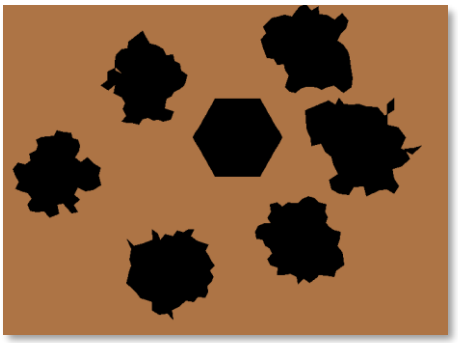
*ITALICIZED UPPERCASE* denotes a tool, sheet or layer of my own making whereas CAPITAL LETTERS – denotes something that I didn't make up, and is actual Campaign Cartographer nomenclature.




The *BLOB* is a FRACTAL CIRCLE. On account of how the DRAW METHOD (FRACTAL) allows for some very neat controls, it's a very quick way to get random shapes – of the stain/blob variety at least:



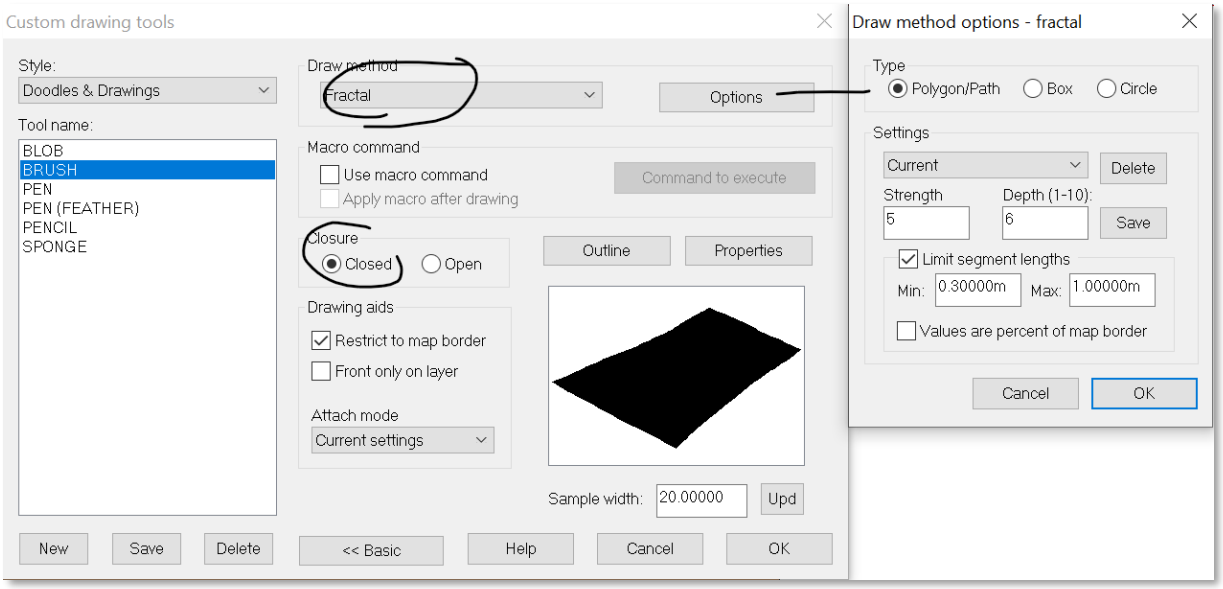

Arrow buttons allow you to gauge the intensity of that randomness. And with space button you can simply "browse" for new shapes until you get one that works especially well, I guess.



*Probably useful!*

Once set, the FRACTAL CIRCLE tool will give a new shape with every click:

Whether for just "stabbing" with the tip of an imaginary brush or quickly covering a larger area, this tool will do the trick. As with any polygon, simply shifting its FILL STYLE to "Hollow" means that I get a contour instead.

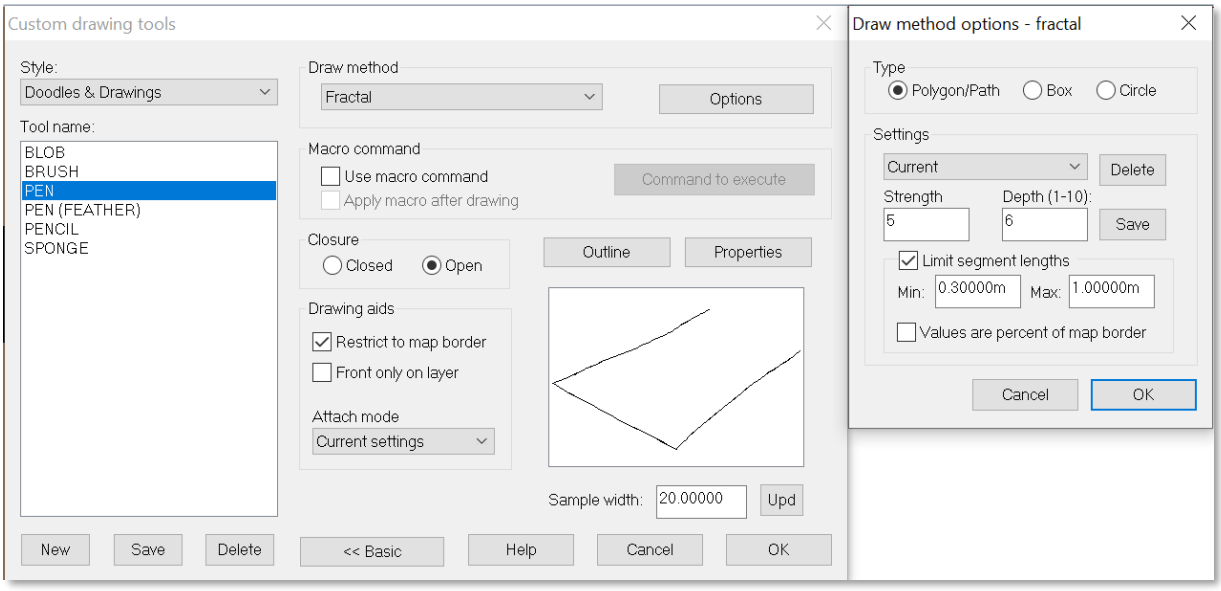



Next up, the *BRUSH* – and also *SPONGE* – are both a *FRACTAL POLYGON*. It's a polygon because its **CLOSURE** has been set to "Closed". As will become clear with the *PEN/PENCIL* below, it is the matter of CLOSURE which decides whether it's to be a polygon or a path. The main difference between the two is that the former with connect the first NODE with the very last one – closing the shape, as it were – whereas the latter will not. The polygon has an edge, but no ends. And this allows for a fill style to cover an area which of course is how I intend to put colour fields into the design.

Under **PROPERTIES**, I toggle "Current" for both colour and SHEET designation – but make the LAYER designation a fixed option: depending on the tool, the shape will go into either the *BRUSH* or *SPONGE* LAYER.

All a matter of personal preference of course; at this point, I just want very broadly defined categories of elements to work with – regardless over how many SHEETS I end up using for each such category. I might end up with ten different SHEET EFFECT settings on as many sheets just for smudgy *SPONGE* bits – but I don't necessarily want to browse through that many tools just to get a simple shape. The *BLOB* of course is granted the full freedom of not having either SHEET or LAYER set in stone. Because it's a blob, after all. Who knows; it could well end up as a speck of ink!

Next up, it's that pen and pencil and…I guess also feather!



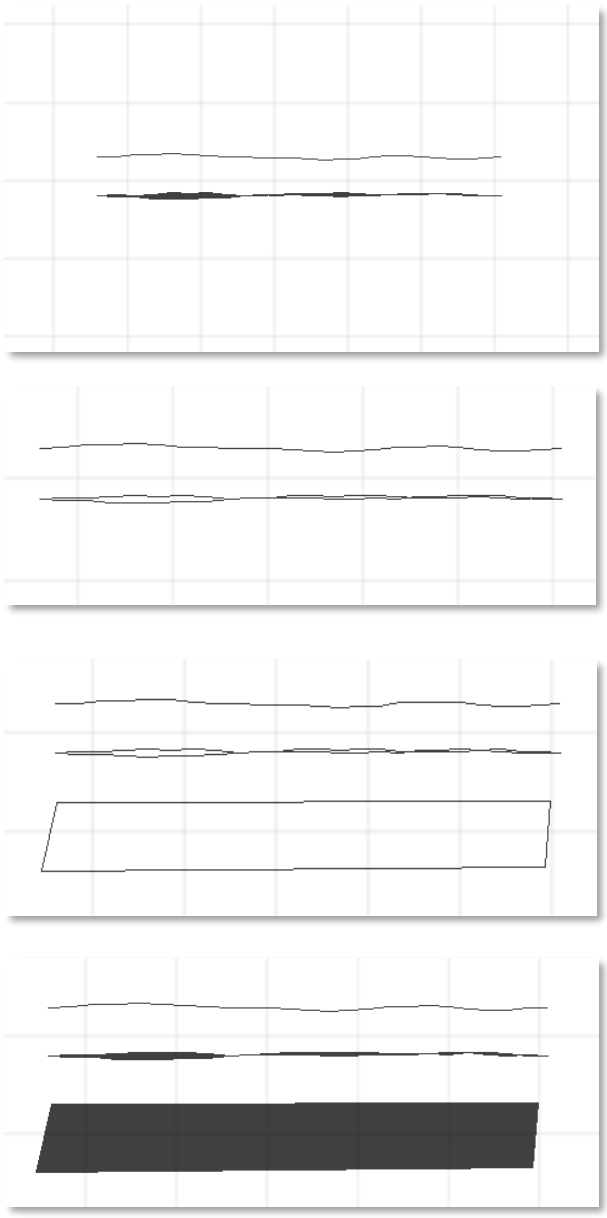

Yup, there it is: with CLOSURE set to “Open”, the shape gets two ends and therefor is a path and there really isn’t much more to say about it other than it should be fairly obvious how lines are going to happen with the *PEN/PENCIL* tools.

Similar to the colour field tools, there is a LAYER for each: the *SKETCH* and *LINE*. I am setting a fixed line width for the *PEN*, but keep the *PENCIL* at “Current” because why not. *Contrary* to the colour field tools – because I am only going to have two SHEETS for my line-works – I designate a SHEET for each line tool: little point not to, seeing as there are only as many of them as there are intended LAYERS.

The *PEN (FEATHER)* variety, then? Well, it’s actually an exact replica of the colour field tools – only its designated SHEET/LAYER is the same as for the imaginary ink pen. *How about we get on with ~~drawing~~ designing some lines and see how these three pen-types work out?*

## Part 3: Lines

There are at least two ways you can design *contours* or lines in Campaign Cartographer, the first of which will be discussed here is using a dedicated LINE or PATH tool – customized or otherwise. The second relies on solid fill polygons to create the shape of a line.



On the left, these two methods can be seen in unison action – with the thinner shape being designed using a FRACTAL PATH tool and the shape of varying thickness being designed using a FRACTAL POLYGON tool with a solid fill.

While the thinner shape simply is a FRACTAL PATH being drawn between two NODES, the thicker is fractal paths being drawn between however many NODES are required to keep the shape…well, shapely, with regards to the current intensity of fractals.

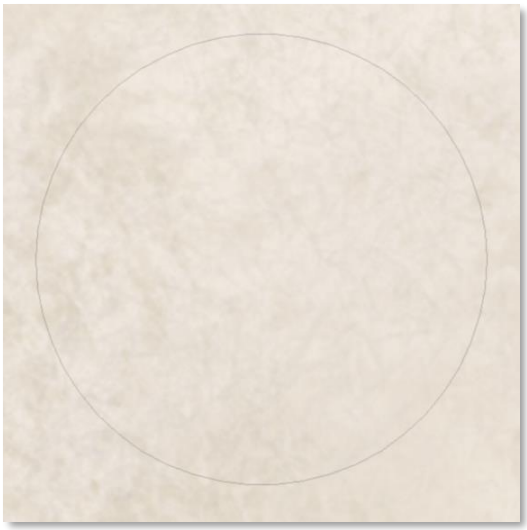
Dialling down to only a very minimum – as per the arrow button controls of the fractal draw option - tends to be more manageable. It is still advisable, however, to actually back-track to the original NODE so as to avoid fractals going too much out of bounds over the distance. The latter is of course especially true for anything that isn't just a single, straight shape of a line.

Setting the fill style to "Hollow", we can see the boundaries of the polygon and also make the observation that there are no principal differences between the box shape at the very bottom of the third and fourth images, and that nameless shape in the middle.

Entirely depending on the context, then, we are either looking at one line and two fields of colour or *a set of three lines* – each drawn by a pen, goose feather pen, and bonkers huge marker respectively.

For me, the end goal here is to design a visual environment which allows for as much doubt as possible with regards to *the method* of creating said visuals. Huge bonus, of course, if I manage to put all the stuff in the right places for it to resemble something you could call a map. But that's a *secondary* objective.

For my illusionist endeavours, I have the SHEET EFFECTS for visuals. I also have FRACTAL DRAW METHODS to give me just enough irregularities to move away from the *machine perfect* of CAD. But that doesn't mean I don't get to capitalize on that machine perfection, still.

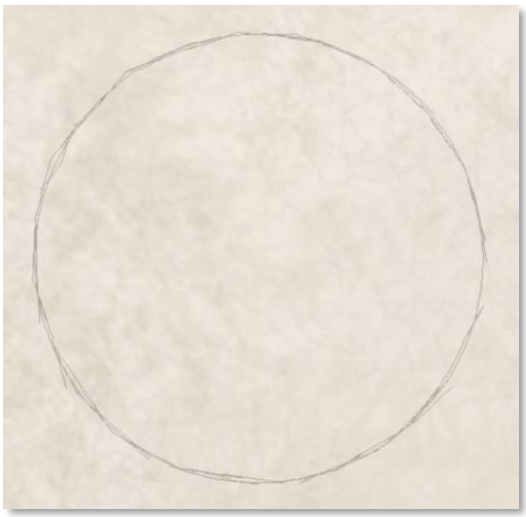


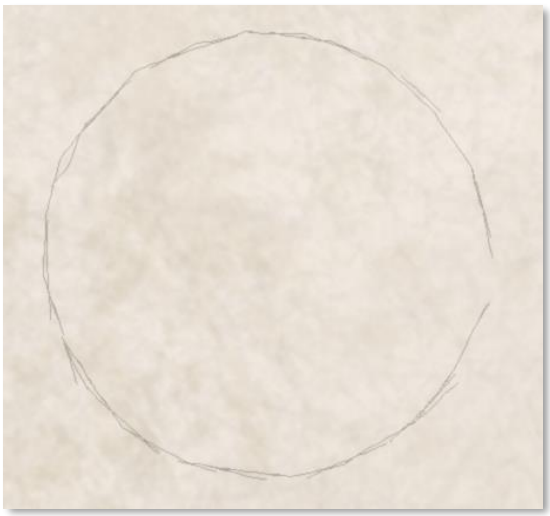
Here is a circle that I created with the default CIRCLE TOOL and put in my *SKETCH* sheet.

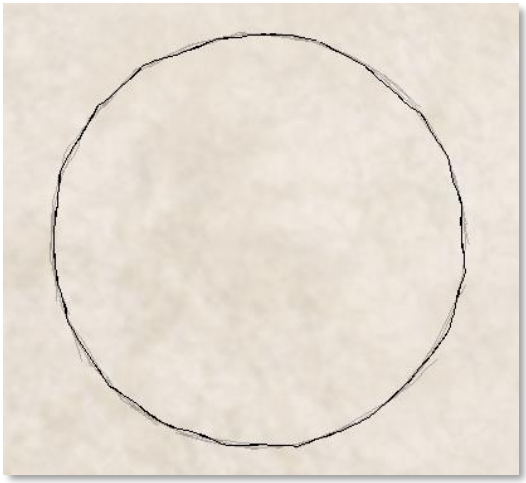
I am not very good at drawing perfect circles (among other things) in real life, so this sketch decidedly needs embellishments for it to resemble a sketch.

To this end I simply add more “pencil lines” with my *PENCIL* tool.

There! A few paths later and it’s no longer machine perfect. As the iteration on the right suggests, it’s quite possible to simply remove the original circle shape and still have that sweet sketchy feel, if not enhancing it.





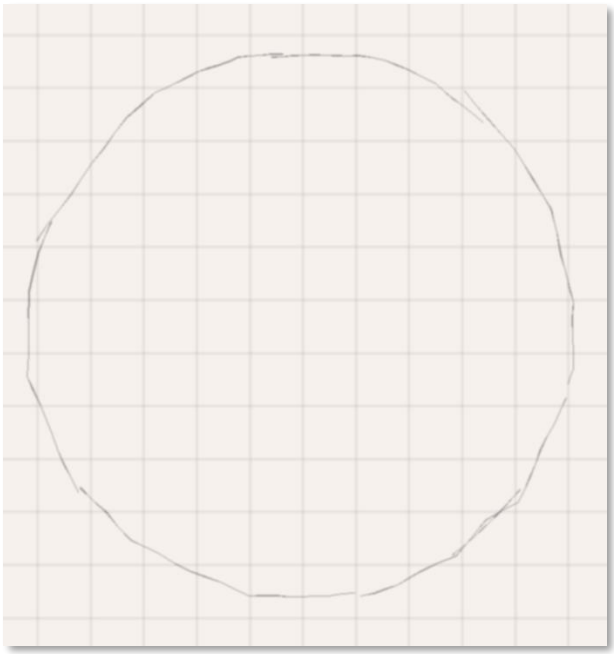


However I may end up applying an imaginary ink line with my *PEN* tool later, it’s decidedly still the shape of a circle. The overall context, however, by now should blur the lines somewhat (the pun was inevitable) between how the circle was created and how it *appears* to have been created.

And because I don’t need to worry about having the proper hand-to-eye co-ordination or skill with a pen, every drawing or sketch is now a potential tutorial:

I just need to figure out how to plot the NODES to get the desired visual result – skipping straight to the end product, so to speak.

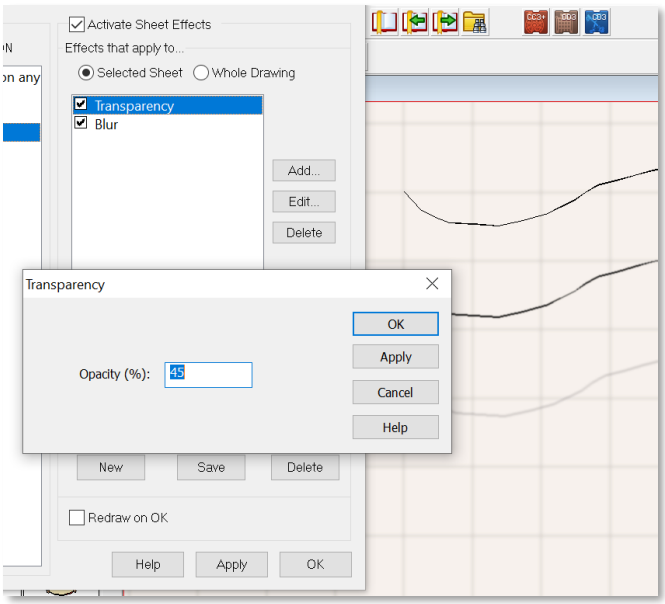
So, what about the context, then? Well, the texture in the background certainly sets a mood – but is it really necessary? In turning it off and keeping just a very diluted brown tone as the "paper" surface, this is what I find:



Why, yes, the **BLUR** SHEET EFFECT seems to work just fine without a fancy backdrop: it will, after all, soften up the edges of the shape regardless of underlying colour tones or texture.

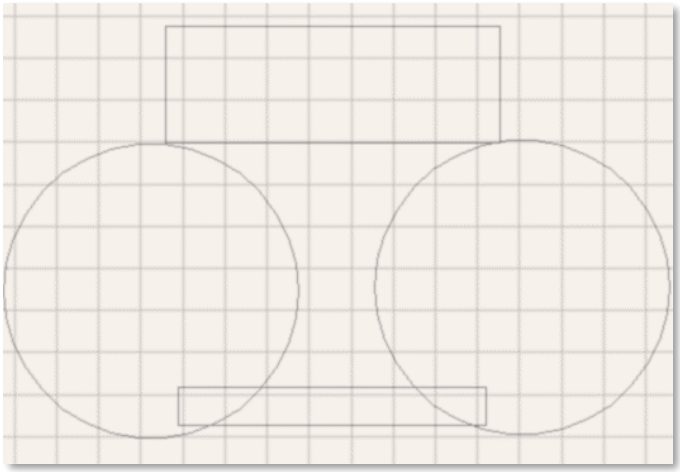
The grid, as an aside, is a great reference for how much BLUR is too much. While it is difficult to achieve a proper WYSIWYG work environment, a grid allows for at least a ballpark reminder of what one will be looking at using – for instance – a Virtual Table Top platform. Finding LINE WIDTHS and effect settings that work at a certain resolution when rendering is probably always a good idea, but the grid will work wonders – I find – for an early draft.

**TRANSPARENCY** makes the otherwise 0/Black colour of the lines appear greyish, like you want from your pencils. I suppose you could opt for simply having an actual grey tone as the selected colour, but I find it's generally quicker to gauge the opacity – with a real-time feedback - than going back and forth with colour options.



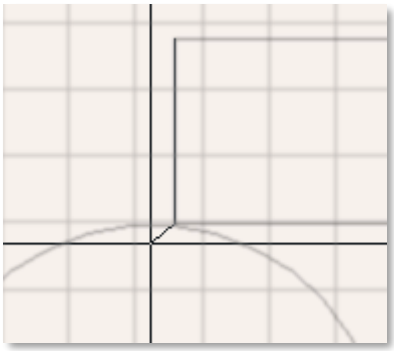

The LINE sheet similarly gets a bit of BLUR, to soften up the edges of the shapes, but won't need any TRANSPARENCY, because it's black ink.

The sample map I have in mind is not intended to utilize the "feather" variety, but for good measure; here's showing how machine perfect is useful with polygons-for-lines as well.



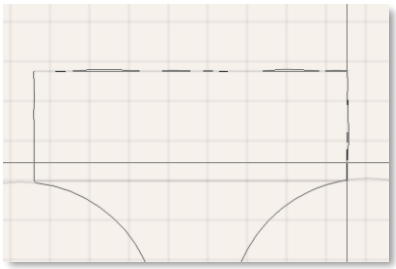
Two rectangles and duplicate circles are quickly assigned to the *SKETCH* sheet. Selecting my *PEN (FEATHER)* tool I left-click at the top left corner of the top rectangle to make that my first NODE.

Then, I press T (for TRACING) and select the top rectangle and trace along it to where its bottom left corner meets with the left circle. Left-clicking again, this is now my second NODE.



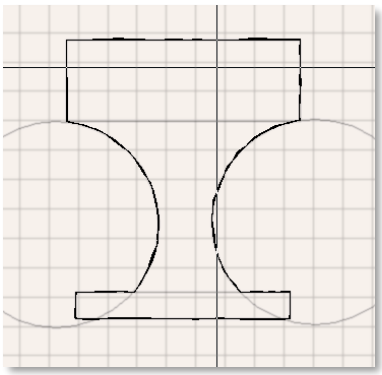
I repeat the process of TRACING along the left circle to where it intersects with the bottom rectangle, and proceed to trace along desired sections of each geometrical figure until such time as I have arrived by the top left corner of the top rectangle again.

Now, it is time to backtrack along the same way I came from – only this time I will be sticking to the path without using the Trace command.



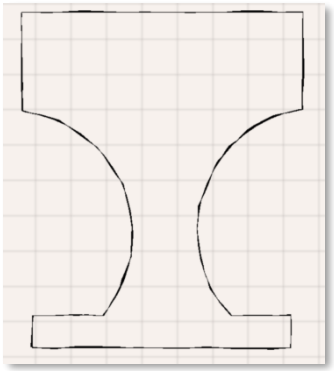
I have made sure I just have one "bump" of the arrow button's worth of FRACTAL INTENSITY and assign new NODES where appropriate – carefully keeping fractals from going rogue and making the polygon too wide. Again, the grid is a great point of reference for keeping things within reasonable limits.

The end result is one part of the polygon's edge adhering to the machine perfect of whatever shape it was traced along, and the other path just casually being drawn according to the fractal settings.



Granted, the same can be achieved with SNAP so long as lines are straight - or the shape you want works with the SNAP SETTINGS, of course.

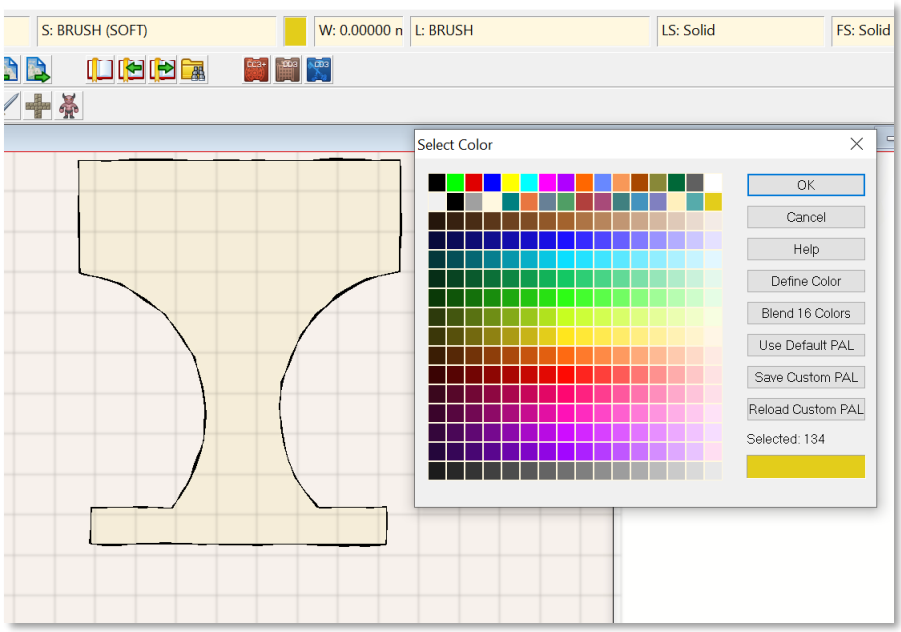
Splendid! Colours next.



*The boundaries of a polygon know no limit other than our own*

## Part 4: Colour fields

So, I have a goblet now which I will want to colourize – meaning it's just the right time for playing around with the various SHEETS I have given myself to work with, with regards to colour fields.



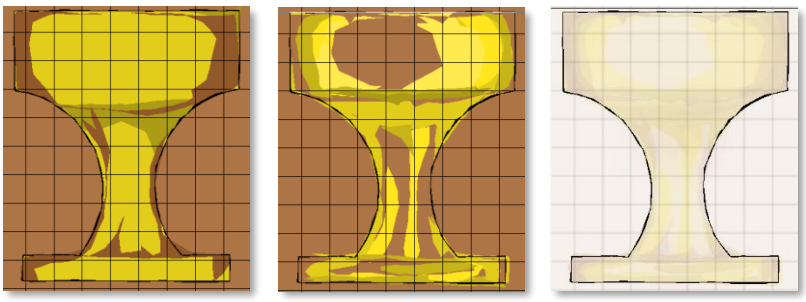

With all the TRANSPARENCY, the final result of course will look very different from what the colour selection panel suggests – specifically; a whole lot more diluted. Luckily, that's nothing that a little overlapping can't sort out.

On the left are two boxes of the same colour: Black/0.

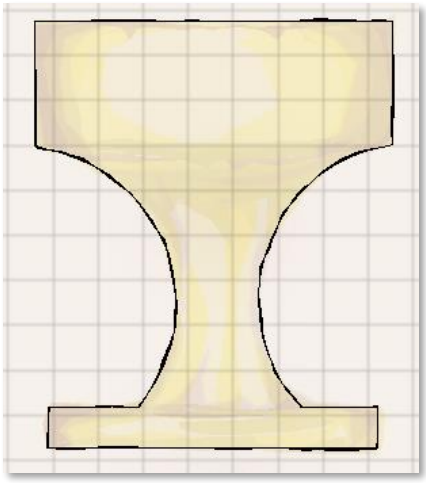
Because of how TRANSPARENCY and BLUR settings differ on the two SHEETS (my "softer" and "sharper" *BRUSH*) – the boxes of course behave differently. Notably, neither appear very black – suggesting that if I wanted actual black on the "canvas" I would have to use a sheet more similar to the *PEN* (i.e. way less TRANSPARENCY).

Because of how TRANSPARENCY works, a single colour can actually give me – not two – *but three* different colour tones where fields overlap.

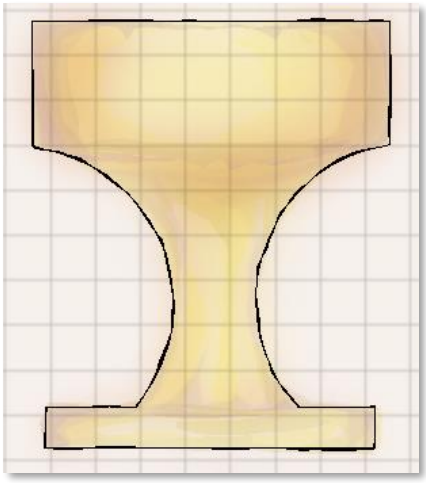
With a bit of cunning colour selection and juggling between the two SHEETS – also paying attention to what is given by overlapping/stacked colours – it's not entirey impossible to even approximate something of a colour gradience.



*One sheet …* *…over another…* *…and SHEET EFFECTS.*



*Base colour fields…*



*…supported by spongy bits.*

Because of how *they* are also transparent, the dedicated *SPONGE* SHEETS will similarly add to the "stack" of colours. With a decidedly "fainter" appearance on account of both higher degrees of TRANSPARENCY and BLUR, the output is of course radically different from that the of the *BRUSH* SHEETS.

Again, playing it smart with colour and *SPONGE* SHEET selection, an even greater sense of gradiance and fullness to the colours can be achieved – not to mention a bit of a glossy sensation.

Before I render, I change the colour of the polygon contour – because why not – and I also add some *SKETCH* lines as well. Because there was totally a sketch to begin with, right? Not two circles and rectangles or anything. Right?

*The Schnaps Goblet of Doom!*

There are probably a million ways the final result could be improved upon with regards to execution here, but – echoing the introduction – this is in itself good news as far as I'm concerned.

It's already not too bad a shape of a goblet. And that would suggest that an encounter map isn't entirely out of reach.

All I need, it would seem, is a scenery and pointers on how to design its elements from above.

*Seeing as we are on a journey by train, of sorts, let's get on with sketching up a railway encounter map!*

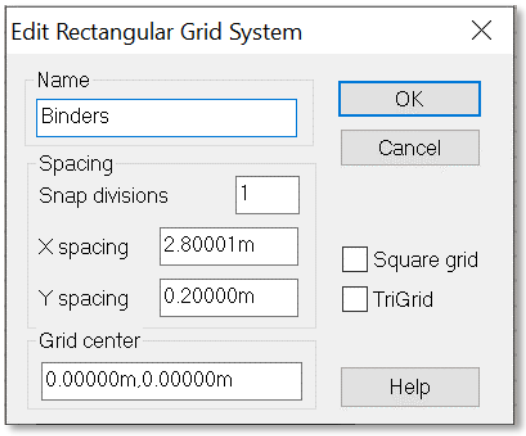
## Part 5: Making the map

The basic map settings are that of the metric system, but I am keeping the standard 5 ft. squares for my grid as a bit of a visual reference – not only for tool and SHEET EFFECT settings. This way I get to use measurements that makes sense to me as a human being, and as a gamer at the same time. I want the map to behave as well as possible within a gridded VTT environment, without gravitating towards the 1.524 m wide doorways trap. Because those doorways seldom measure 1.524 m.

Funny enough, however, the standard railway track gauge adopted in the 19th century measures 1.435 m over the insides of the rails…and 1.524 m over the outside. If there was a good time to use the 5 ft standard grid environment, then, it probably was in designing maps with railways.

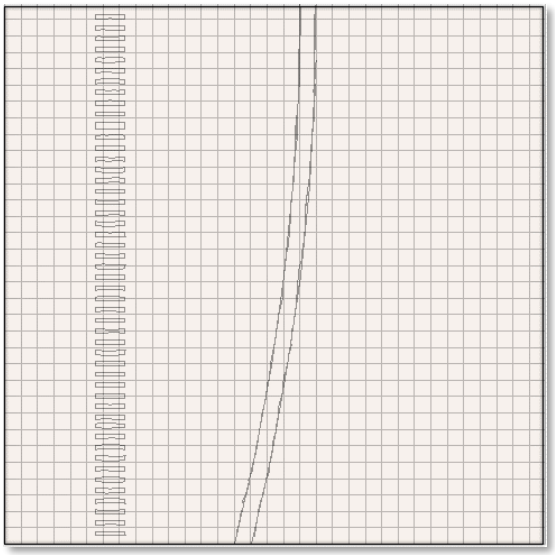
**The sketch**

The initial discussion of railway track gauges is not entirely without merit. Because the map will feature a railway track across it, there will need to be track binders to go with it. Having the measurements of the track means I can create a GRID SETTING that corresponds to the shapes I want to design.




While it may not seem much the resulting SNAP intervals will provide a very quick way to get a bunch rectangles of the desired dimensions; 2.8 x 0.4 m with a 0.6 m spacing between them.

I quickly change the OPTIONS of my *BLOB* tool to "Box" and start pushing out enough rectangular shapes to cover the distance of the intended track. To get a contour line, rather than a filled polygon, I simply set the FILL STYLE to "hollow".



Now, not all of these binders will show in the end because there will also be railcars - some of which are to be derailed.

I don't know just yet which parts of the track will show, however, so rather than trying to envision that bit now – I opt instead to *deconstruct* the railway track later.

This is sort of similar to how I find it wortwhile to design naturally occuring topography and other features first, and putting in the artificial features such as houses or roads etc. later.

All depending on the required degree of landscaping, of course, I do find that the process of adapting the artifical to the natural is easier than the other way around.

And so, the intact railway would be the "natural" and wherever the demolition charge was put is going to be the "artificial".

If anything looks wonky in the final product, I can always go back and make bits that work better. For now, however, this is a good rough draft.

**The ink lines**

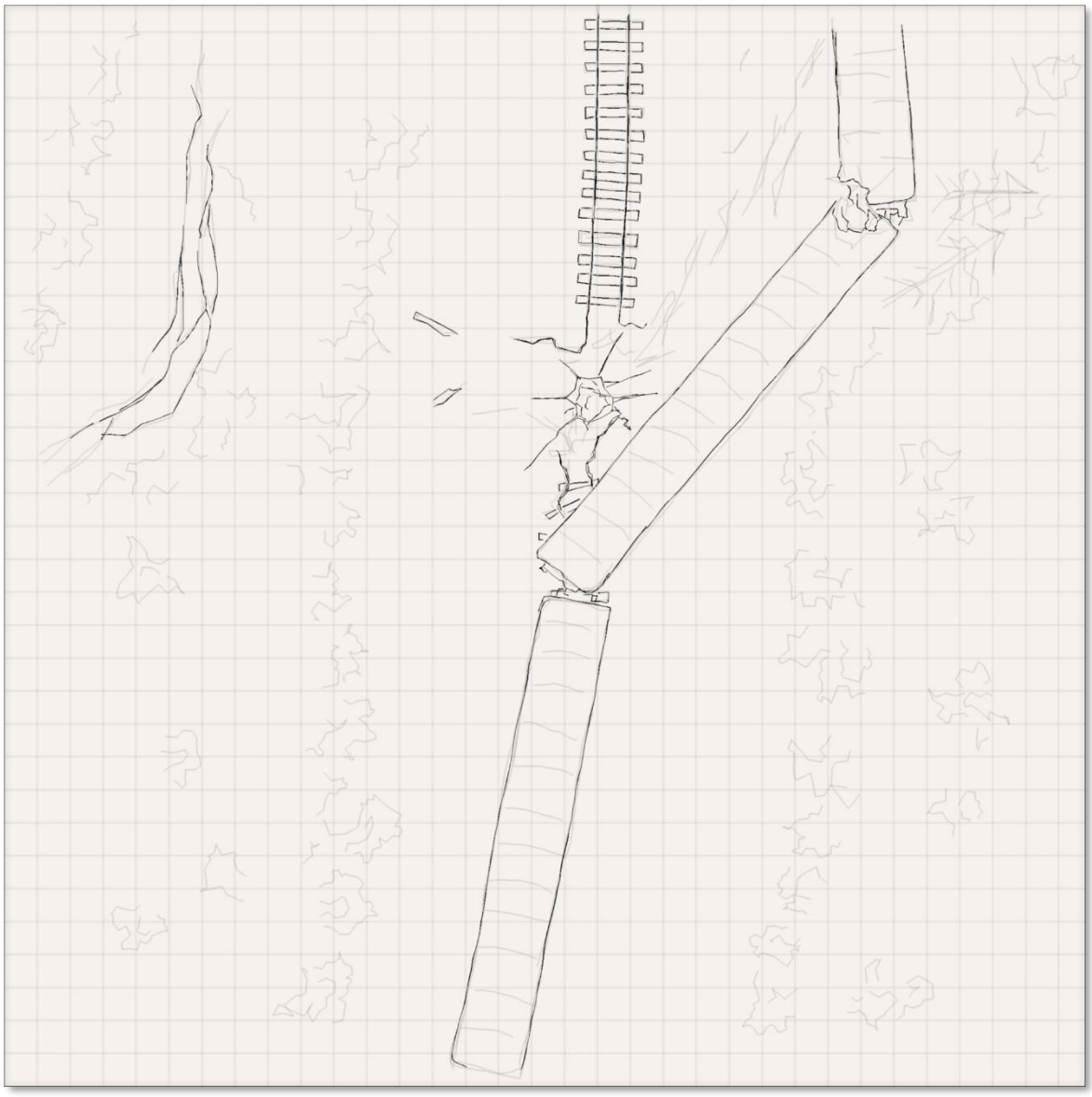
The rough shapes provided by the sketch can now be filled with the *PEN* tool.

I want the underlying sketches to show to some extent, so I trace them manually – sometimes making the line more precise than the rough draft. This way, the draft will spill over into the final image which should help drive home the illusion of a hand-drawn piece. I also make a point to "lift" the imaginary pen, leaving gaps in the lines in some places.

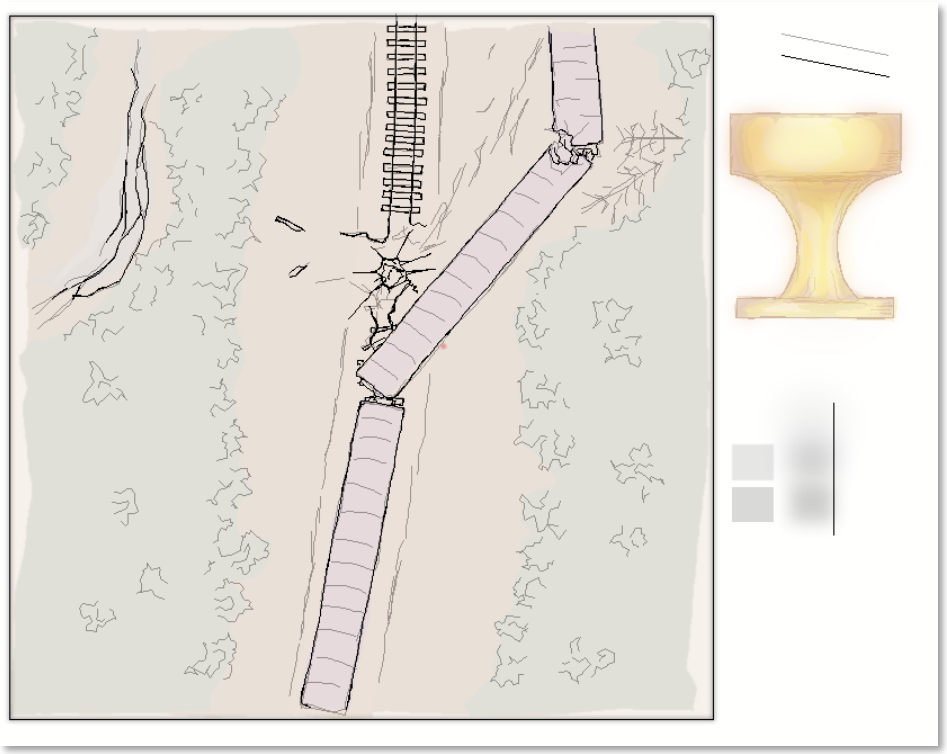
If I want a thicker line at this point, I will simply put in another path – similar to how one might go over the same spot multiple times with a 1.0 mm pen.

Because the edge towards the railway is going to be the most distinctive part of the surrounding forest, I am going to hold off some of the terrain filling until I get the colour in.

Satisfied that I am on the right track (puns, everybody!) I proceed to lay down some general colours and also set up my work-space a little.

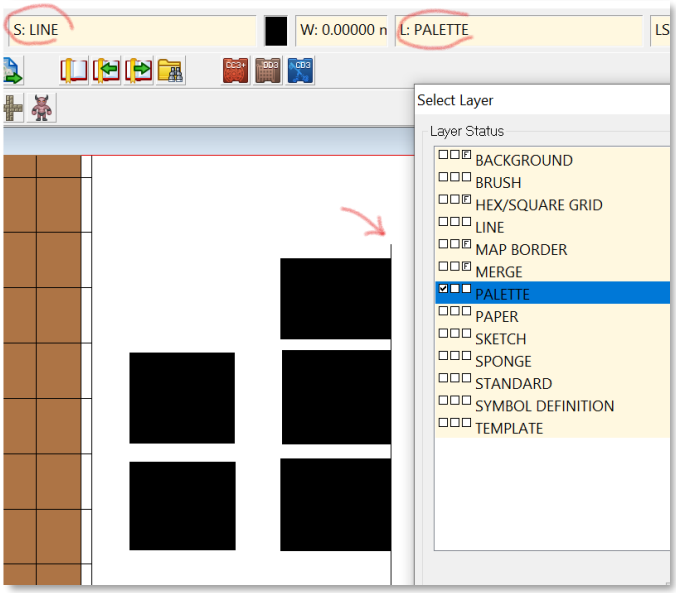


**The work-space, colour, and beyond**



The Schnaps Goblet of Doom gets to sit right outside the map border, serving as a reminder of where I both *want* and *do not want* to end up with my colour works.

Immediately above it, I keep one line each of the *LINE* and *SKETCH* variety. If, for whatever reason, I want to use the default tools this will speed things up a little: rather than manually selecting SHEET, LAYER, or other PROPERTIES I simply can grab what I need from a pre-existing object using the **KEEP** command.

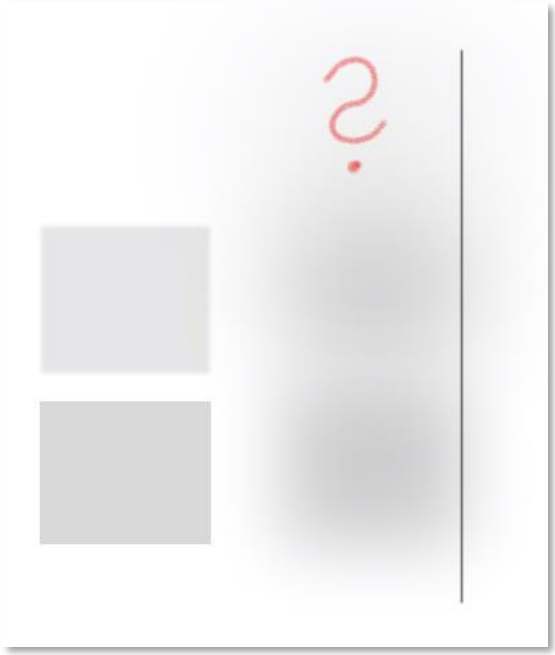



The same principle applies to the grey stuff immediately below the goblet: the virtual palette.

Setting up my palette, the first thing I do is put five box shapes in two rows, somewhere outside of the map border. I then add a layer which I simply call *PALETTE*.

I then drop a line in the *LINE* SHEET– for visibility – along the right edge of three of the boxes.

The reason for this is because layers can be frozen (toggling the F-BOX) - which means that objects in the layer are locked from manipulation. Handy for isolating particular bits and pieces – particularly so for the purpose of using the KEEP command.



The properties of each of the boxes correspond to the five SHEETS I have set up for colours: the softer and sharper ”brush” SHEETS, and the three modes of smudgy ”sponging”. And they all have further been put in the appropriate LAYERS, too, in case I want to – again – utilise the DEFAULT TOOLS.

With BLUR and TRANSPARENCY, some boxes will be easier than others to select with KEEP – the need for a guide stick is all but too clear!

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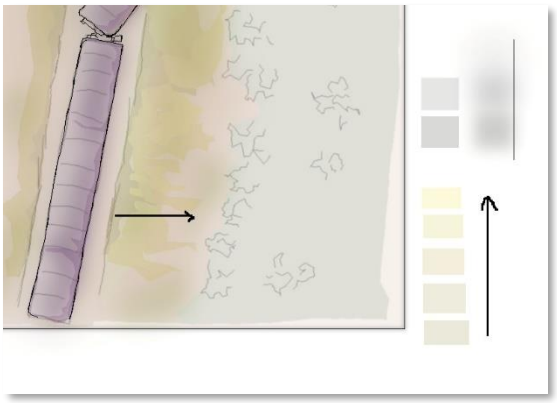
The palette as a concept is ultimately, of course, entirely a matter of personal taste. But I will argue that it is extremely handy for keeping a shorthand for any particular structure.

And structure, in this context, boils down to *what colours* were used and in *which SHEETS*.

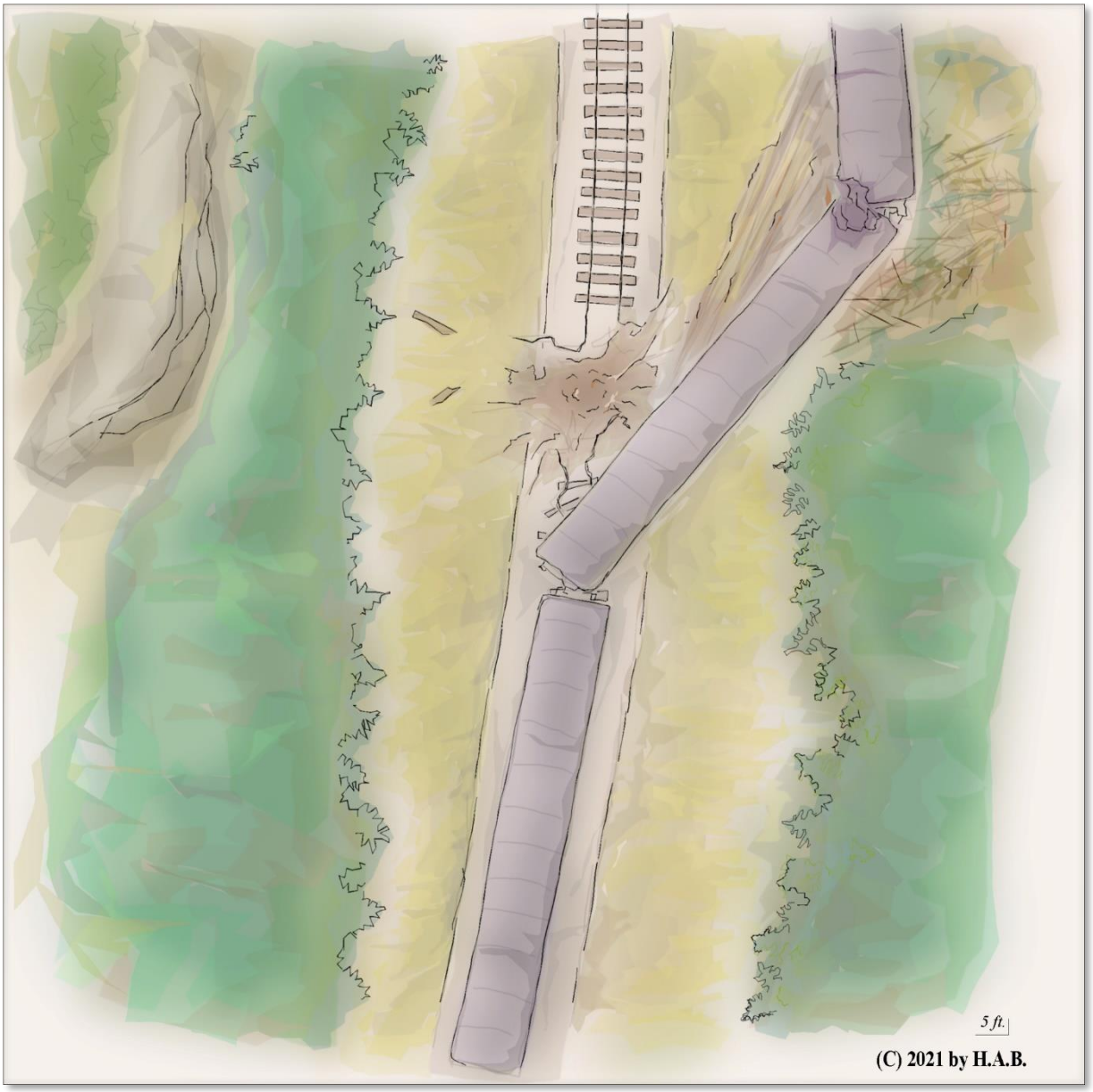


Arriving at, for instance, the particular set of colours for the strip of terrain between the tracks and the forest was a process. As such, it would have been wasted if I didn’t also somehow ensure a quick access to those precise tones: there are only so many times you should reinvent the wheel, so to speak.

Granted, this partiuclar step of the overall process – the colourizing – is perhaps also the most time consuming.

It is where the illusion of brushstrokes ultimately comes into being and while that – at its core – is still just a matter of putting things in the “right” place and order there is, after all, *the matter of finding those places.*

And that’s it, really.


5 ft.
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