SUBJECT E

tell me shortly about your background, what area do you work in or study in
at my high school I did in Brazil we have a technical High School where you can
have the regular high school with some technical subjects and I did programming but
after I went to college I went to the visual arts college so I started working as a
designer after that but this was 10 years ago so more recently I think two years ago I
started to use programming in my design practice so I started using, I had a course
on nodebox software, it is programming but it's visual so you connect boxes and it
creates images but after that I started studying processing and then drawbot, both of
them im using a lot and recently I saw a talk of a designer that he creates small sites
in p5.js so that his clients can create images using his Script so they put some
parameters there and it gives an image which they can use as posters or Facebook
post stuff like that and it's really inspiring because my processing and drawbot scripts
are used for myself to create a PDF but never the client I don't expect him to run
processing locally or drawbot but to use a website is something that I can imagine
them using so that's how I came into p5.js and the project I said that I created
recently goes that direction its a webpage where the client inputs some numbers and
it generates a Instagram post, something in the past I gave them Photoshop
templates but that was never really really agile, I mean that they have to open a
program that they don't necessarily have easy access to and it takes time it is heavy
so it was a very good experience in this way.

but currently you're working in graphical design?
yes, i use programming to complement but it is always graphic design, im not a
developer

**what does these tools give you that you cant do with the other normal
graphical software that you use or why have you started using them?**
both of them solve kind of the same thing but in different manners. they allow me to
create complex images that I would never be able to manually because it would take
hours to do one image and if i wanted to change one parameter it would take hours
so they allow a different kind of exploration that I couldn't do manually. processing I
like it but it's not, drawbot is more easy to create PDFs and vector images so I have
been using it more recently more frequently because it's more print based.
processing I think it has a lot of functions for interaction and interactive interfaces
and these I find them interesting but I've never really explored that side. generally i
use processing in the python language and drawbot is in python. they are not really
very different.

so it is eome kind of generative art you create with these?
yes

so you have used P5 for one big project?
it was not really a big project, it was a test. i wanted to see if it would work out and
help the client. i didnt want many risks, but it went really well. I have some
experience with javascript, so it wasn't a steep learning curve or anything like that
and I actually found it really useful to have a sketch running in the browser. I did
another project using it, i created one image using it and it was fine as well so I think
it has a good future with me

you already knew processing before this project?
Yeah, so the draw loop and the setup is the same, but they have differences, but they are good differences. it is easier to manipulate the dom and create interfaces than in processing, i found that really useful

how involved would you say that you are or have been in the community for creative coding?
not a lot. Here in Brazil, the talk I told you about that was inspiring was in a processing meet up, so I know some people that are more involved and I sometimes talk to them on social networks but I have never contributed. I am in some mailing lists and I have been in for forums but I just haven't ??? and done pull requests.

Lets go to the project that you talked about with the Instagram posts. How would you categorize it, was it part of a bigger project?
It is a project for high school students to participate, its a test that has 6 online phases. throughout the year there are images we have to create, posters, stuff to market it, so i create a lot of images for this project. so the last one that i talked about, we ended the first phase of registration and had 15000 teams of students from Brazil so i wanted to create an image that had points where each student was a point in the map. I wouldn't be able to do that manually so I'll try p5.js again and it kind of worked. its a map of Brazil and you see it is kind of exploding, seems like a particle accelerator. each point was a team that has registered and they are they all pointing towards the centre, the city where the final will be. so this kind of exploration I wouldn't be able to do manually or it would take me a lot of time but for this case I asked the programmers is just send me a json with all the coordinates and i plugged it in p5.js and start exploring

why did you choose to use p5 for this thing?
I could have used processing or even drawbot but since I had the nice experience before I'm trying to learn a bit more. It could have been anyone but I wanted to try this one so I can I don't know learn a bit more and get better at it

how was it to work with P5, was it really simple or did you have some issues somewhere along the way?
it was really simple I mean I don't know if it's performance wise better than processing, I found it a bit slow but I mean there are 15000 points walking around the map I don't know if it's supposed to be fast it was slow but I mean that's fine I mean I had to wait 1 minutes to generate the image but ok. sometimes i find processing a bit slow, but it may be me not doing things right or maybe things are slow because there are lots of things involved. not sure if it is a problem with the tool or something that would necessarily happen.

do you use this the same way you use drawbot or processing, that you create the image and then it is used in different places or do you have this image on a website where it's dynamically generated?
in this case it is a static image. it was overlaid with texts and sent on the Instagram page of this event but the fact that I used json with data that was generated dynamically means that on the second round of registration and we gott 20000 teams for example, i can create another image with more points representing the

new situation. so in that sense it is dynamic because I can generate other versions of it

but you did not use P5 because you wanted it to be on the web, it was just a local tool?
I'll send you a link to the other project I did in p5.js as I said it's just a prototype but each field on the right is a state in Brazil, it is for the same event they generate a map for each round counting how many teams are still participating for each state and there are 30 states to take some time to do it on photoshop. the idea is that they can feed the numbers here and generate a map and save the map. so this is a situation where the fact that I can generally it dynamically and online is great. the other example not so much but it is an advantage. this example is running P5.

it seems to work quite well, it renders quite fast
there was an issue with that one because the loop is continuous and it took me awhile to figure that out that it was kind of slow on some computers because of that, it was easy to click the button and it generates the image and stops the loop. that was something I had to learn, that I did not know at first, but I mean I have a faster computer than my client and they complained that the site was slow and then I knew that it was running continuously and listening.

what would you say are the best use cases for p5?
something that i want to explore more is this functionality of having the client input some data and it generates an image because it is something that there are instances where I have to create an image that is just kind of the same image all the time but I have to put the text that they generate so I think it would be an easier way to create design systems for Instagram and Facebook where they choose the background, title, text and then it generates the image following the visual identity guidelines but I don't have to be directly involved at least on the day to day images that they generate so that for me is a great use case that p5.js has that other languages maybe don't have. I mean processing can generate an applet that the client can execute but it's not as simple it's not something that you can open with their mobile and go to a site for me at the moment that seems to be something I want to explore more. generative design is something that I have been very interested in for the last couple of years so I'll probably use it for other things as well but then I might use drawbot or processing, it is not exclusive.

what are the most impressive, coolest things you have seen for how p5 can be used?
Not really. Dan Shiffman on Youtube does some tutorials on processing and he has been using a lot of p5.js in recent tutorials but I never thought of this as exclusively p5.js have seen tutorials of him and done the same thing in processing so it's not I mean often the use case that I have said I havent seen anything that can be done with it that other tools/ frameworks couldn't do. it is something that I haven't explored deeply so I might be saying silly things

have you looked at other tools or libraries that that can these similar things?
yeah I did want one project last year in I think it was called paper.js and it was nice. at the time I think I looked at p5 but people said it was difficult to generate an SVG or PDF. for this project I needed to have an SVG so I went with paper.JS. it was fine but

the documentation wasn't as great and I found some structures unintuitive so it worked but I wasn't a fan so I don't plan on doing new projects with it

had you already worked with p5 before at that point?
no, i just read about it. i thought about using p5, because i already knew processing but I checked how do you export PDF for SVG and the answers weren't good, people were complaining that it wasnt easy you couldn't do anything so I saw that the paper.JS could do it and I went with that.

but it was not intuitive?
im not sure i understood well, but it has a mode where it isnt proper javascript and the interaction with the dom wasn't as easy. I had a feeling that although it seems nice, the documentation isn't great and I think it's just one guy or two guys working at it so it's something that's not going to get really better with time. it's not something I'm watching because it's a technology that maybe not around for long.

you mentioned that you have used D3 as well
it was a project before college. I'm doing a Master's degree as well so we have some some courses and i had a visualization that I did in D3. it was simple it's not very sophisticated but I liked the way that you process data within the loop that creates but I haven't been really involved in visualization. i mean I liked it and maybe I've will explore more in the future but I need to be in a situation where I need to create graphs and stuff like that. it is promising but i havent had the opportunity.

the projects that you have shown me with p5, they could also be considered data visualization in a sense
yeah, maybe i could have done that in D3. but the fact that it is something created with time and there is some randomness this seems more like something that processing or P5 do well than D3. maybe if i knew D3 in depth it's totally fine I could do it there

Have you used any other tools or looked at are similar to p5?
I know there are frameworks that create SVGs and stuff like that but yeah I mean I've seen their homepages but I never really looked into it. it takes time and i already have A lot on my plate.

you are doing a master in In Design as well?
it is in the computer engineering faculty, but it is with design because it involves code and so they're kind of in-between areas and I felt a good fit there

sounds like the same thing you have been doing already
yeah, similar but the design faculty does not have people working with generative design and programming so i thought i would be more lost in the design faculty than in the generative faculty and the teacher there like my projects, so it was fine. it is not a perfect fit where i am but the alternative would not be perfect either. it goes with the thing that im doing

how would you decide in which cases would you use P5 in a future project and in which case you would use some other tools like drawbot or D3?
if i have to generate a PDF or a poster or vector image then I will definitely go with

drawbot or maybe processing. processing has some 3D functionality that can be exported as PDF, it's not perfect but works kind of. so if I'm thinking of generating a poster or an image for print I will definitely go there. if it's something for the web I will consider using P5, i will probably use p5, the experience so far has been good so it's something maybe if I created and the vision in the future will be this print i will go to drawbot and other things go to p5, even animations because I know it has some animation functionality I have not explored it but it's something that I want to explore in the future so maybe even animations will go with p5. it is different than drawbot, because there you create the image and its done, so it is not continously doing it. it is a different process but it makes sense, the print is finished while the screen allows for something to change

does drawbot work online or is it a desktop application?
It is a desktop application, I think you can run it as a library on python, it uses some text functions from the Macintosh operating system so it only runs on Mac which is a bummer, because there's something that processing and P5 can do which is run on a Linux server and and drawboty cant you have to hire a Mac server which is expensive. im not happy with that. there are some people who have worked on porting it to linux but it isnt done. i have a mac so i can use it but if i lose it and have to another persons computer that isnt a mac this would be an issue. it is something I don't like but it generates PDF really well so I have to use it. it also has something for my masters is good is variable fonts which you can manipulate in drawbot which is something that I am not sure processing can do yet I think not. so it is kind of on the edge on topographic technology that is nice as well.

any final thoughts that you want to add anything you thought about during our discussion anything regarding P5 or creative coding in general?
Not really