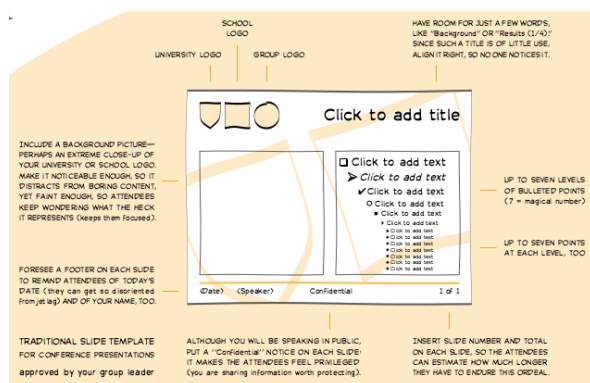


Passport to the T_EX canvas

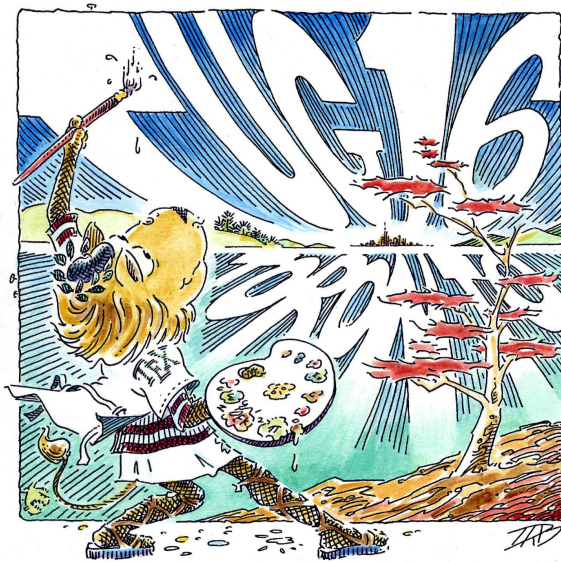
Pavneet Arora

Welcome.

Whenever I begin a talk, in my head I hear Jean-luc Doumont's admonishment on what not to do when presenting. (From his article on presentations, "Traditions, templates, and group leaders".)



And so I will resist the temptation to fall into the more obvious traps, although along the way I will no doubt transgress. Presumably we all know which city we are in. And we know the reason for our being here:



Even so, some of us may yet be unfamiliar with one critical aspect of this city: the pronunciation of its name. When Duane Bibby and I were discussing concepts for the conference logo, I put forth a small request: that the logo should have a small Easter Egg which would be a reminder of just this point. Any takers on what that Easter Egg might be?

Pavneet Arora



That's right. Toronto is pronounced like piranha. So when you're at the next border, and the officer asks where you are heading to, simply keep this mental image in mind, and you will come off sounding like a true local.

The inspiration for the canvas and the painting style comes from The Group of Seven, an influential group of Canadian impressionist painters—AJ Casson and Lawren Harris being two of my favourites. Those on the Georgian Bay excursion this coming Friday will have a chance to see many Group of Seven works in person at the McMichael Art Collection.

1 Canvases

1.1 Collaboration

This year at Microsoft's Build conference, Satya Nadella used an interesting turn of phrase: he spoke of "conversational canvases". And let me just say that in my wildest dreams I never, ever, ever imagined that I would open any presentation of mine by quoting the CEO of Microsoft. I hope this is more of an indicator of what Microsoft is about these days than an indicator about me.

So let me say what a delight it is to have Kevin Larson from Microsoft's Advanced Typography Group join us. When I went about trying to contact the group, I landed up on a website that looked as if it was a screen scrape of a Windows 97 screen. The old Tektronix 4010s that I used to work on had a crisper image, and for that matter could be used as a crisper given the dosage coming off the panel!

It was a happy day indeed when I heard back from Microsoft, and then had an email exchange with Kevin. Kevin will be speaking this afternoon.

But back to canvases: what is this canvas that Satya was talking about? The buzz nowadays is about IoT (Internet of Things, or not only network enabled but aware devices), intelligent bots enabled by cloud based machine learning, augmented reality, and virtual reality.

When I thought about it some more, I began to suspect that what he was really referring to had more to do with a specific type of human activity, or mode of "interaction". That the canvas across these interactions was the common element. That is, in this "mobile first, cloud first" vision, the device has become the canvas.

When over-the-air TV ruled this continent’s airwaves, if one were to switch from CBS News — with its exquisite branding with the very beautiful Didot typeface under the guidance of Lou Dorfsman — to ABC’s Wide World of Sports did we refer to it as different viewing canvases? Or was it simply different content utilizing the same canvas, namely the television?

However you might consider the distinction between canvas and content, the question remains: “What sort of activities does this canvas enable and encourage?”

There are three prominent ones with conversational canvases: (1) collaboration, (2) cooperation, and sometimes (3) confrontation.

So these new world canvases would be Facebook, Twitter, Skype, WhatsApp, Slack, GroupMe, OwnCloud, email or any of the other bewildering range of choices available. They are all marked by a cacophony of voices, each clamouring to interject the next riposte and make a mark.

Here the canvas can also be seen as a viewport for the race to acquire the largest number of users as quickly as possible. We attribute virtue to the canvas not by its content but rather by its viability. And a declining or even steady user base is taken as a mark of irrelevance.

In the immortal words of perhaps the greatest of the modern worldly philosophers:

“If you ain’t first, you’re last!”
— Ricky Bobby, *Talladega Nights*

And since we are so dependent on — at least the first two activities — collaboration and cooperation, it is natural to put so much emphasis on these conversational canvases. Plus, who amongst us can resist the siren call of shiny new technology, and what it might represent of our needs and aspirations — our innate desire to be acknowledged for being at the vanguard of the future?

Indeed it is reflected in the very names given to the gatherings where these are showcased, or as company mottos: Build (Microsoft), Invent (HP), Maker Fair (Raspberry Pi).

It is an expression of our creative impulse into something tangible, whether it be a woodworking project, or a new tablet PC.

But if this is the main attraction of the big top with its “barkers and coloured balloons”, to quote Neil Young, what is happening behind the tent?

In other words is this all there is?

1.2 Discovery

Behind this illusion of spectacle, behind the curtain that forms the backdrop of the glitz and glamour of the stage is another form of activity. And this activity sustains the show. It is the activity of Discovery.

This endeavour is lonelier; the path more difficult. The effort expended can span many years, even decades, with little in the form of assurance that a positive outcome awaits the supplicant. And even if you are mostly right, or even completely right, someone else might still beat you to the punch. Acknowledgement of great achievement in this activity is rarely resounding.

Working here can often feel like pushing on a string. Think of the connection that takes you from Menaechmus’ discovery of the mathematics behind conic sections, to Kepler’s work on planetary motion, to NASA’s Apollo missions. This is the 47th anniversary of Apollo 11, and one of the most compelling things on Twitter is not the two political conventions! It is the real time broadcast of the mission communications for that Apollo mission.

Discovery is the driving force behind research, both pure and applied. It spans the fields of science, technology, engineering and mathematics, or STEM for short.

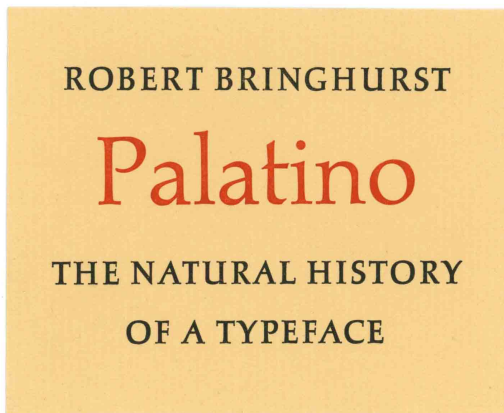
In this vast domain there too is a common canvas. Here, it is the *Page* that holds court. Even if we don’t yet know for how long, the primacy of the *Page* is, for now, unquestioned in this dominion.

And the *Page* is the ideal canvas for using \TeX . For \TeX has an unequalled ability to express complex ideas using the specific notations and syntactic constraints used in all of these fields. The rarest of cuneiform marks, along with their most pedantic rules of layout can all be handled with aplomb using \TeX . Even after all of these years, it is able to adapt to the natural language of the domain rather than force the language to conform to its limitations. (Cartoon originally from somethingofthatilk.com.)



This canvas, in contrast to the conversational canvases — perhaps only because those are still evolving rapidly — has a natural order. We may still be in the process of abstracting overarching rules of representation on those electronic canvases — and here I am thinking of Twitter Bootstrap as a significant milestone along the way — but that is something for the future.

Thanks to another one of our special guests, Robert Bringhurst, we are able to talk about proportion and spacing to arrive at a much deeper understanding of what constitutes beauty on this canvas. Just think of the implications of this. We can speak of beauty with a common appreciation. What a marvellous thing to share! Robert Bringhurst will be speaking tomorrow.



But is even Discovery all there is? The more appropriate question might be, whether the activity of Discovery qualifies as Aristotle’s “Unmoved Mover”, so to speak?

1.3 Contemplation

There is an even more isolating endeavour than *Discovery*. And it is *Contemplation*, which in turn feeds its nearest neighbours *Intuition*, *Imagination*, and *Interpretation*.

This is the most solitary of endeavours, and the practitioner must traverse a vastly more barren landscape as they climb the slope and try to pierce “The Cloud of Unknowing”. The artist must confront their own self-doubt when faced with that blank page or surface.

“The writer who loses his self-doubt, who gives way as he grows old to a sudden euphoria, to prolixity, should stop writing immediately: the time has come for him to lay aside his pen.” — Colette

And what of this canvas? What tools might we use to express our ideas.

This is how we landed up on one of the themes of this conference, which you will find on the pens that are part of the registration kit for the conference.



This theme is “Pen to Print”. It acknowledges the connection between artist and artisan that allows enduring works of art to be created. The source of an idea often has its earliest expression in ink.

We were privileged, yesterday, to have visited Tim and Elke Inkster’s unique printing house, Porcupine’s Quill. Craft and Quality should never be allowed to be taken for granted.

Coming back to the pen itself, these pens were made by the Garland Pen Company of Providence, RI, the same location as where TUG was founded. Some of you might notice that there are three fonts used on the inscription, and the em-dash is shown in “code” — that is, as a triple hyphen. In this audience, this is akin to having used Comic Sans, in all its garish glory, when putting out the UN Declaration of Human Rights.



But here too, a small puzzle to tickle the mind. The font family used on the pen is Lucida, and I only wish Chuck Bigelow and Kris Holmes were here so that we might have been able to call them out in person. No doubt we can query Chuck further on this when he arrives tomorrow. The first line, identifying the conference, is done in Lucida Grande Mono DK which is the special edition dedicated to

Don Knuth. It acknowledges the essential step that to get from the handwriting font used for the word *Pen*, to the book font used for the word *Print*, the content must first be coded. We used the province rather than country to draw extra attention to the subtle distinction between the shapes of letter ‘O’ and the digit zero, without resorting to explicit marking, one of B&H’s design goals.

2 Passport

I have spoken at length of canvases, and over which of these canvases T_EX’s powerful expressiveness still has sway.

Now let me talk about the passport. These days it has become an ID document—something that identifies the holder as to who they are. A means to get through ever tighter security when entering an airport, boarding a plane or crossing over a border. It is nowadays treated as a gateway key.

But to me, a passport conjures up a much more romantic image of a more innocent time. It speaks of exotic lands, and people on faraway shores; of adventurous travels, and the chance to shed our skins of the familiar patterns of daily life. To stand in awe of unfamiliar vistas, and know with certainty that they will form indelible impressions upon the backdrop of our memories.

At its essence a passport allows us to delight in the stories of others, and by doing so connect our own to theirs. To my mind, that is all there really is. We are both made and then defined by our stories.

When I put, as the title to this talk, the “Passport to the T_EX Canvas” I am referring to TUG. I think of TUG not so much as an organization, but as a collection of conversations told as stories. Of talks given formally at conferences such as this, but more importantly, discussions carried on in the margins.

Conversational canvases bristle with activity, exciting and sometimes enraging the participants even as they sit in silent, electronic isolation. In contrast, the T_EX canvas—the *Page*—which demands of the reader quiet, concentrated effort, can allow the same reader to escape noisy and boisterous surroundings.

As it did with me late one night on Rue Sainte-Catherine in Montréal, overflowing with revellers, and where I found myself in an open-to-the-street cafe reading Northrop Frye’s *Myth and Metaphor*. This canvas, without the transactional pull from advertisements interjecting themselves, allows us to soar alongside stories into our imaginations.

3 Stories

So let me tell you about a story. A story about this bag. It was given to me by Pavel Striz as a parting

gift at the ConT_EXt meeting in Břejlov, Czech Republic shortly after my first TUG conference, which would have been in San Francisco. Of all the people here, I think only Arthur and I attended. Have I missed anyone?



On it is the inscription “Karlovy Vary International Film Festival”. I had no idea of its importance when I received it.

A few months later I was taking some training in Atlanta, Georgia. I was sitting at a table, head down, working out some assigned problem. This bag was on the table. All of a sudden I heard a voice beside me: “Did you enjoy Karlovy Vary?” Actually, I have no idea what precisely was said, as it didn’t really register at all, because it was so out of context.

I turned to find a giant of a man. I was easily dwarfed in his shadow. And his voice had a southern drawl. It took another few attempts by him for me to finally comprehend that he was talking about this bag. Well he went on to explain that he had grown up in rural Georgia, and ended up marrying a Czech woman. His father-in-law had a property in Karlovy Vary, and so this man along with his family spent a portion of their summers in the Czech Republic. He had learnt to speak fluent Czech.

And we got to talking about typesetting, T_EX or in this case ConT_EXt, and the arts scene in and around Prague. What an extraordinary conversation it led to!

Lest you think that all stories come this easily, let me tell you of another chance encounter on the same trip, and a missed opportunity.

I was at the home of a family member, and they took delivery of some furniture. On the truck was the company name Grissom.

Now I imagine that many of us were mesmerized by the Apollo programme. For me, the Apollo

astronaut who somehow caught my imagination was Gus Grissom, who died tragically on the launchpad in Apollo 1. I think it was both because he had an engineering background, and also because there is hardly a photograph of him that doesn't show him laughing. (Photo courtesy of NASA.)



I mentioned this to one of the delivery persons, and that there was a high school in Alabama dedicated to him. This person didn't recognize the name, but wishing, I think, to continue on with the conversation mentioned that the moving company was his uncle's, Marquis Grissom. I didn't recognize that name, but I should have since Marquis Grissom played for the Montréal Expos, and is by all accounts a class act through and through.

So there we were, telling our stories past each other. If only I had stopped and asked him more about his uncle!

Stories are around us, and they can bind us together in kinship.

It is the hope of the conference organizers that TUG act as your passport, and the messenger bag that each of you have received act as a repository to many new, and wonderful stories. And that it may inspire some of you to put at least some of those stories down on the T_EX canvas for others to enjoy for years to come.

Welcome to TUG 2016!

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