I first compiled this presentation for the **internal conference** that brought together the team of "Art in the Age of the Anthropocene" in April 2022 (1,5 y ago). I've been trying to map **how graphic design is being used in local art exhibition institutions** right now, if and how some of them have been moving towards more sustainable solutions in this area, and then to propose **recommendations and possible alternative approaches**, so that the communicative aspects of exhibition-making would be as economical and ecological as possible, but also exciting and high-quality in the sense of graphic design. Things to keep in mind and things to think about. And if we have time, we could brainstorm a bit altogether in the end about how these ideas could be applied to your own exhibition or institution.

First of all I do want to point out that these ideas that I've now been digesting and researching and experimenting with, found an **output** in the exhibition AAA, as well as an **interview-article** "Graphic design and its environmental impacts" in its catalogue (in the sub-section "Sustainable museum"), as well as in the sustainable exhibition model, in the section on GD & publications, compiled together with Renita Raudsepp (head of publishing at Kumu) and Karin Vicente (leader of the sustainability model project).

Second of all I want to point out that to my knowledge, no one has really done such an overview before, and generally (careful!) local exhibition institutions haven't done much design thinking involving graphic designers, in order to solve the problem of wasteful or unsustainable exhibition design. When I'm looking around on the scene, I see that so much more could be done or proposed by the graphic designers themselves, or demanded by the curators, but this incentive also has to come from the upper management level of the exhibition institution, in order to establish even simple standards or guidelines, and to allocate time for all of this. So if you're a GD or a curator, I hope you get some more ideas for exhibition graphic design solutions in individual exhibition projects, and if you're in museology or management, it'd be really cool if you could initiate totally rethinking the whole strategy of exhibition communication and designing these solutions as consistent systems together with graphic designers.

## So.

When we think about graphic design related to exhibition production, the main three categories in discussion are **wall texts**, **labels**, and **additional information carriers – exhibition guides, A4s, brochures** etc. For this small study, I took the physical exhibition/museum space as the main framework, and left the wider aspect of media & communication – posters, printed & digital ads – rather in the margins, as these outputs are often already decided/habitualised by the institutions

and a GDer might not have much agency over them. But they could also be quite closely connected, as we will see.

The main role of all three elements here is to give information about the exhibition and the works exhibited in it, but also, graphic design has more and more come to bear the spatial assignment of creating the feeling that you've entered an exhibition.

This is the main point of **large scale wall texts**: to give you the immediate understanding that you've arrived and, somewhat like on a digital screen or a visual essay, the texts, headlines/keywords and discourse have now become an integral part of exhibition design. [xamples]

What's interesting is that I've been looking at some **historic exhibition documentation photos** from Soviet times, and this kind of very present textual layer on the walls cannot much be seen in exhibitions in that era.

- **tiny paper labels/strips** (typewritten/handwritten/typeset), either folded into a triangle or glued onto surfaces (Moldaavia, ETDM)
- wall texts = small poster on the wall AND/OR (Kunstihoone)
- the actual multifunctional offset printed poster for the exhibition, used for street advertisement (Signe Kivi/Armeenia)
- **supergraphics** = large handmade letterings either in the exhibition or on the windows (ARS)
- the display window was often used to create basically **a separate immersive artwork** that could, but didn't have to convey textual information, in order to create this feeling of entering an exhibition (Aeg&Koht, Originaal)
- [more examples]

So to me it looks like we've lost a bit of creativity on the way, as we've become so accustomed to having huge walls of wall text greeting us at every exhibition. This habit seems to have **developed throughout the computer era and thoroughly normalised now**, when CNC plotter engraving, vinyl stickers and large format printing have became available and popular.

This is an example of huge printed PVC boards as a labelling system/exhibition guide for an exhibition of 4 months. I see large-scale plastics like this more and more recently, where they could be easily replaced by paper or smaller equivalents.

(I haven't taken many photos of them, because they're literally everywhere.)

Of course, I've been a big fan of **vinyl sticker lettering** myself too, because it's so easy, delicate and effective, and I would love to say there are many cases where it is totally justified. Like

- when the exhibition is up for a long time or
- when you're in a super hurry and need to guickly fill an empty wall, or
- if it really needs to be a sturdy artistic piece.
- Also, a wall text and the labelling is quite obviously such a small, but at the same time very visible part of exhibition production overall, and to focus only on this without a wider sustainability strategy would be akin to greenwashing.

But still, over time, I've realised it's much more exciting to also think of alternatives, much like the Soviet artists and designers had to.

And as a freelance graphic designer, it is in my power to propose the alternatives to the clients.

(my last sticker example – Jonna)

Because, so, this is how the **vinyl sticker** works. The computer sends the vector data to print, the plotter takes in a large sheet of plastic, a knife cuts shapes into it, the "negative" extra is removed and thrown away, the "positive" text is glued onto the wall with the help of different tapes and stickers, which are all disposed. The plastic is PVC or nafta, and as I understand it goes straight into mixed waste, it's not reused or recycled, and it can be a pain in the ass to remove. I actually consulted the two main sticker guys in Tallinn, **Lauri Lenk and Veiko lliste**, and they confirmed that there is currently no paper-based or otherwise more environmentally friendly sticker.

But Veiko actually has (had 1,5 y ago) a readymade solution to offer which would need some investment coorganisation between museums. It's a German vertical UV printer called **WallPen**. [...read the list]

Over the past few years, we've seen a similar ink-based straight-on-the-wall solution in the Tallinn Art Hall & Kai Art Centre, but instead of a printer, **human painters** are used. This was first executed by graphic designer Carl Robert Kagge together with curator Siim Preiman for the exhibition "The Art of Being Good", where adding this crafty-handmade vibe to the digital typeface of the museum's visual identity was conceptually fitting. And they also did large scale improvisatory calligraphy straight on the wall. But the **Art Hall since kept using this human copying method for other exhibitions**, and currently there are at least two? exhibitions up in Tallinn that have these hand-copied wall text elements, made by the painting artist Solveig Lill.

This is an example at Kai, which took her 18 working hours, and a lot of it at night, because the texts came in quite late, as they do. So here, the digital typographic design is prepared by a graphic designer, then projected onto the wall with a quite pixelated projector, and Solveig would

constantly check and compare the letter shapes from her phone screen, and paint the letters with a brush and acrylic paint. The result is interesting for sure, and in this case again essentially conceptually fitting, but I'm actually pretty skeptical as to the success of it **as a universal sustainable alternative to a vinyl sticker wall text**. It's not great from a typographic point of view (it inevitably butchers the letter shapes defined by the type designer), it takes a crazy amount of time, it's still very digitally addicted – there's a considerable use of electricity, and all in all it's a pretty in-between solution – not really handcraft, not really digital, not really font, not really calligraphy – especially as it's not even made by a calligrapher.

We have a few **professional calligraphers** in Estonia, like Lewis McGuffy. A calligrapher would have the expertise to do large handmade lettering exactly how it was always done before the digital era, basically just by improvising a "font" on the go, just like the Estonian type legend Villu Toots did&taught.

Or then even **natural handwriting** would be more authentic and fast. Here's an example by Brit Pavelson, a great GD who's been embracing handcraft as a design tool for a while now.

Or then if you really want to have **specific predesigned letterforms painted** on a wall or elsewhere, these could be prepared as **stencils or specific reproduction manuals** by the type designers themselves, like it used to be done. These stencils could be used to paint or write way more cleanly and quickly onto the wall than the projection painting.

**Silkscreening** could be used. The NY Guggenheim Museum does it for all of their wall texts straight on the wall, that's probably the best stencil mechanism for detailed typographic reproduction. I thought of doing that also for Kumu, but we had technical difficulties – but if an institution had a small silkscreening studio setup and a couple of frames fit for this, it would totally be doable.

Instead, I used this weird leftover wrapping paper donated by the Tallinn Book Printers, just to draw attention to the fact that **you can silkscreen on mostly anything**. (And here we used local clay paint = clay powder + water.)

A really stunning use of paper and silkscreening as an exhibition design element (Põhjala galerii).

Or you could even just use the light-sensitive silkscreening emulsion on whatever screen or fabric as a poster itself.

Or, since the silkscreening emulsion is also not the safest chemical, you could make cyanotype fabrics and develop them.

Both for silkscreening and cyanotype, you would need large paper or plastic printouts for the developing, so it's also not ideal, but fabric is much more easily repurposable or recyclable.

Or you could paint the letters by hand.

There are many ways and places to UV-print on fabric, most places print only on their own fabric rolls and prefer polyesther, but there are places that print cotton/linen as well and might be willing to use your own textile. Textile panels are good for dividing the space.

One of my favourite thoughts so far has been this one. **Manual typesetting** is the most sustainable system one can think of really: you have a set of infinitely reusable physical letters. Imagine if a museum had their own typeface made into laser cut or 3D printed physical typesets in different sizes. These could be used to compose wall texts and also labels. They could be attached either as magnets onto metal, or letter blocks on a shelf-like structure, or then plugged into some kind of prepared frame/material. Typesetting would take time, but the services of a graphic designer could basically be eliminated.

Of course, the **classical printmaking way to use and print movable letterpress type** could also add a beautiful touch to the whole exhibition design.

Large-scale wood type also makes for a cheap way to print large-scale posters. Might also be a cool excuse to look into DIY natural printing inks.

One of my biggest discoveries that I now promote to everyone has been **UV-printing**. It's basically the same exact technology as WallPen, but on a huge horizontal table. Can print on anything. Kumu has used it for a long time for vinyl sticker labels and wall panels, in a way where they paint the sticker base with the same paint as the wall and then UV-print the information on it.

For AAA, I wanted to remove the adhesives from the equasion. We painted some old book covers that I had leftover with clay paint, and UV-printed the labels on that. And we also used back sides of old PVC banners for Kumu's internal banners.

Wall texts and large infos could also be on **other types of hard material** (wood, glass, plexiglass) that you could reuse for some other purpose later on, build furniture out of it or **use up pieces** that cannot be used for anything else any more. There are quite good options for **printing**, **engraving and cutting options on wood or glass or plexiglass**.

You could also combine **laser cutting and light**. I remember when to IKEA and saw this arrow lamp – a shape placed in front of a lamp/light source that makes a positive image visible, super simple, but could perhaps be used instead of supergraphics. Or another charming example was sent to me by Ranno Ait – why not use windows and natural light instead of walls for wall text?

Or how about repurposing **old diapositive projectors**? Last year, I was researching the history of photo-typesetting (in the archives of book designer Jüri Kaarma) – **transparent film** was the main GD tool for most of the 20th century and even the largest designs fit on a 35mm film. Maybe an old slide projector could be used to show large amounts of wall texts slide by slide, instead of printing it out, thereby also making it more interactive/intriguing.

A more economic alternative and investment would of course be **e-paper**, which has also been used to some extent, e.g. at the Estonian National Museum, and there are several e-label providers online oriented towards museums. **E-paper is similar to laser printing** – electric signals produce actual ink dots on the surface; power is only needed for refreshing. It can be programmed to show infos interactively like at ERM. Multicolor e-paper apparently exists, and somewhat larger sizes are available.

E-paper doesn't produce light, while **digital screens** do, and this might well be used as an advantage in terms of site-specificity and **replacing disposable posters** or wall texts with screens, like in the case of the dark entrance of the Tallinn Art Hall (when it was still in the city), where the screen functioned both as a **lighting solution** and information carrier. Screens can also accommodate **high-quality moving image**, which can be quite a nice poster replacement medium for a graphic designer to experiment with. But it wouldn't probably make sense to replace all site-specific wall texts, which have to be mostly static, with digital screens.

And to my mind it's also not the best to **replace labels with digital and audio guides**. It creates a problem of **accessibility** (what if my phone is out of battery) and **demanding time and attention** (I will *always* get more immediate information out of labels, wall texts and brochures than out of a digital guide that I have to navigate back&forth on my personal device full of other distractions. I would much rather concentrate on the exhibition space than my phone).

Plus by now we all kind of know that the virtual is also material, using a lot of energy in some anonymous servers out there in possibly problematic & mischievous ways.

It might make sense for some exhibitions conceptually to make a webpage instead of a printed brochure (two examples). But this digital footprint should also be acknowledged.

The **low tech magazine** is a widely known project in this regard. The online journal is run by the journalist's personal solar battery in Spain, and the website is built with super low-res images and programming, so that visiting it uses as little energy as possible.

At the Art Hall, in addition to the digital guide, they are printing **A4 size guides with their A3 desktop printer at the museum**. This means they can do it very much on demand, not order large amounts of offset printed copyruns which produce a lot more waste. But even though it does the most important = conveys necessary information, the quality of the digital print is often pretty bad (a general problem with digital printing). It looks purely functional, not very high quality, and rather mass produced. And maybe this is fine, but as a designer, I would be sad to see this kind of model everywhere.

The Art Hall previously had these newspaper brochures, which I would say had this aspect of collectability/design value to them. The design was somehow adding additional value to the exhibition & the publication had value separate from the exhibition itself. When the additional printed matter is carefully and conceptually custom made for each exhibition, and when its distribution plan is thought through after the exhibition ends (maybe all the brochures of a year's exhibitions would be bound into an exciting little catalogue to be distributed in bookshops), it might help the themes and contents of the exhibition live a longer afterlife.

This kind of degradation of design quality is generally the case with **templates**, even though using them makes a lot of sense. The idea here is that the designer who is responsible for the institution's visual identity creates a set of predesigned and preprinted empty templates, and the institution can then print on them according to predefined guidelines (often, there's an in-house designer for this). It's economical, sustainable (not much paper waste), should hold the visual identity together, the offset printed backgrounds or frames should compensate for any lesser quality digital printing or mistakes. It's being done more and more as an element of visual identity. At the **Art Hall**, there are offset printed A3 booklet covers for different languages. At **EKA**, it's the same but for different departments/types of info. At **EKKM**, there's a framework based on embossing, overlaying or cutting the EKKM logo in the middle of the design, and they invite a new graphic designer each season to play with these tools. Plus they produced these embossed plastic folders + offset printed A4 sheets so that if they need to print out a message or a menu or whatever, this would still be in a designed frame.

It would be cool to then see this template-modularity still put to more experimental use. I was reminded of a beautiful museum visual identity by GD studio Experimental Jetset in 2004, which was wholly based on A4 sheets. They set out to make large-scale wall texts out of small-scale self-printed modules in this DIY way. So you could actually totally do large scale information panels in-house with just a small desktop printer.

Or just order it from a copy shop! **Large wall texts** could freely just be **on paper** rather than wall/sticker/plastic/wood. Most copy shops have digital plotters, with which they print anything bigger than A3; there's a roll of paper up to 1,5 m wide and the printer can print on it basically however long you want it. Other option is, again, UV-printing.

These info-posters could be attached to the wall with nails or tape (still using less adhesives than a whole huge piece of sticker). Paper can be fully recycled and the production cycle of it is much more transparent than many other industrial products or digital alternatives.

And even if you do use those, at least find a way to repurpose the bigger printed stuff, like with the weatherproof PVC banners at EKKM, or making tote bags out of printed flags (example at Selver; Estonian Packaging Circulation helps with this as well).

To conclude, here's an updated list on which we based the Sustainable Exhibition Model GD section: thumb rules to keep in mind about printed matter, like desktop or offset printed catalogues and brochures. Paper; inks; quantity & digital/Indigo printing.

The most important takeaway from all this should be to **produce responsible**, **quality design objects that can be worthy on their own** = distributed and used after the exhibition ends.

However, the graphic design of an exhibition still stays a very marginal aspect of its production, and especially in the case of longer exhibitions (at least half a year), in which case electricity-based solutions make the least sense, **the vinyl stickers doesn't have to be demonised either**.

It'd be most urgent to implement circular or environmentally friendly solutions (e-paper, reusable/compostable materials) to museums and galleries where exhibitions rotate every few weeks or months.