2. We can alternatively embed $\mathbf{Vect_k} \hookrightarrow (\mathbf{sSet}_{\mathrm{Q}} \downarrow \mathcal{U})$, and this should be the right direction toward type theory (Kan complexes).

3. We also have two possibilities $\mathbf{Set} \hookrightarrow (\mathbf{sSet}_{\mathrm{Q}} \downarrow \mathcal{U})$ or $\mathbf{Set} \hookrightarrow (\mathbf{sSet}_{\mathrm{Q}} \downarrow \mathcal{U})$.

4. If $\mathscr{M} = \mathbf{sSet}_{\mathrm{J}}$, and $\mathfrak{A} = \mathbf{Set}$, we get the quasicategory theory of sets. Here we regard the inclusion $\mathbf{Set} \longrightarrow \mathbf{sSet}_{\mathrm{J}}$ as a right adjoint, and indeed as geometric point of the higher topos $\mathbf{sSet}_{\mathrm{J}}$. In particular it's a monoidal functor with the cartesian product.

   We can put the relative pushout product on $\mathscr{M}_{\mathcal{U}}[\mathfrak{A}]$. This way we get a monoidal category of quasicategory of sets. In particular we can determine the controlled quasicategories $s(\mathcal{F}) \longrightarrow X$ that look like:

   – The integers,
   – The rationals,
   – The real numbers;
   – The complex numbers;
   – a ring, field, groups, Hodge structure (...and maybe a prime number in a quasicategory)

   It's reasonable to believe that this should join Lurie's program on *Higher Algebra* [6]. Morally we're enhancing the Grothendieck topos $(\mathbf{Set}, \times, 1)$ by a *minimal homotopical model*. And the advantage of this is that we keep track of everything since there is always an weak section (Voevodsky section) $\pi : X \longrightarrow s(\mathcal{F})$.

5. Doing the same thing with the Quillen model structure $\mathbf{sSet}_{\mathrm{Q}}$ should normally fits in type theory.

6. We can restrict to the right adjoint $\mathbf{Vect_k} \longrightarrow \mathbf{Set} \longrightarrow \mathbf{sSet}_{\mathrm{J}}$, and do the relative lax pushout product. The category $\mathscr{M}_{\mathcal{U}}[\mathfrak{A}]$, that is the quasicategory of vectors spaces will inherit a monoidal product where the unit is the map $* \longrightarrow \mathbf{k}$ that selects the unit element of the field $\mathbf{k}$. We still have a functor that is monoidal $\mathscr{M}_{\mathcal{U}}[\mathfrak{A}] \longrightarrow \mathbf{Vect_k}$.

   Doing this is not only general nonsense. We can use for example the category $\mathbf{sSet}_{\mathrm{J}}[\mathbf{Vect}_{\mathbb{C}}]$ as coefficient category for general TQFT and so on.

7. The category $(\mathbf{Set}, \times, 1)$ is known as the Grothendieck topos of sheaves over the point. Given a general site $\mathcal{C}$, we can form a homotopical minimal enhancement of its category of sheaves by taking $\mathscr{M}$ to be the model category of simplicial (pre)sheaves *à la* Jardine-Joyal. The category $\mathscr{M}_{\mathcal{U}}[\mathfrak{A}]$ in this case is still a combinatorial and left proper and we can perform again Bousfield localization to *converge* to Morel-Voevodsky work [8].

8. Finally it's important to observe that if $\mathcal{U} : \mathcal{A} \hookrightarrow Mod(\mathcal{A}^{op}$ is the Yoneda embedding of a dg-category, then a QS-object is exactly what Toën call quasi-representable (see [13]).

Keep enhancing !