

# Successiveness and operadicity

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## Abstract

Succession is placed in the context of lifted number rings. Linear-style orderings are considered as operads which split fields by introducing locally transcendental numbers that perfectly close their ancestors by introducing gaps.

## Paper

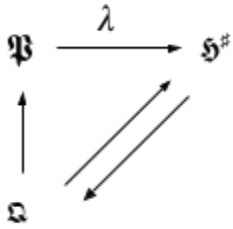
It is well known that the large majority of quasi-well-ordered sequela exhibit linear-like tree-level ordering. Formally, for a pair of branches of level  $k$ , one may define succession as the free ideal  $\varphi$  in the following expression:

$$\forall \alpha, k, (\exists (\alpha \subseteq^{\downarrow} K) \leftrightarrow (\alpha.k+\varphi) \in K).$$

Where  $\alpha$  is a countable ordinal,  $k$  an ordertype, and  $\subseteq^{\downarrow} K$  downward closure in some class  $K$ .

For  $\varphi \cong 1$ , one obtains a critical point  $\varrho$ , which gives rise to the transition map  $\gamma^k \mapsto \pi^+$ , where  $\pi$  is the  $(p-1)$ th degree divisor sending  $\{\kappa, \dots, \gamma\}$  to a super-compact ordinal  $\epsilon$ . For some tiny  $\epsilon$ , we have that there is a regular pullback into a non-degenerate and quasi-coherent clopen class  $\mathfrak{B}$  whose maximal ideal is  $\varphi-\tau$ . Let  $\lambda := (\tau = \epsilon)$  be a  $p$ -th order proposition in which there is a binary relationship  $(\varphi + \epsilon)^{\mathbb{E}} \varrho$ , and  $\mathfrak{B}:\lambda$  be the true sentence in which this evaluation holds. We will let  $X^{\mathbb{E}} Y$  mean that there is an effective (forgetful) equivalence from  $X$  into the pro-objects of  $Y$  such that the sub-object identifier at a representative locus  $\mathcal{U}(\varphi^{\lessdot})$  is equiconsistent with its image at  $\mathcal{U}(\varphi)$ . One then obtains that  $\varphi$  is the perfection of  $\varphi^{\lessdot}$  when it is identified with the neighborhood  $\text{pyk}(\varrho)$ , which behaves identically to the  $\pi$  we have established here.

Importantly for us, the automorphism  $\mathcal{U} \rightarrow \mathcal{U}|\pi$ , when specialized in this way, provides a rather lucid technique for lifting from  $\mathfrak{R}^b$  into  $\mathfrak{S}^{\#}$ . Thus, one obtains the following diagram:



where  $\mathfrak{S}$  is identified with  $\text{spec}(\mathbb{Z})$ . Note that  $\mathfrak{B}\lambda^0$ , the case when  $\tau$  is less than  $\epsilon$ , is simply the identity on  $\mathfrak{B}$ , and therefore trivial. We can then proceed to make the following precise identification:

**Lemma 1.0.0** For  $\pi_1(\gamma)$ ,  $\text{sup}(\kappa)$  is an isotopy of  $\text{inf}(\epsilon)$  and is effectively equivalent to  $\rho$ .

**Corollary 1.0.1** For  $\pi_1(\kappa)$ ,  $\text{inf}(\gamma)$  is an isotopy of  $\text{sup}(\epsilon)$  and is effectively equivalent to  $\rho$ .

**Corollary 1.0.2**  $\pi_1(*) \rightarrow \rho$  is a contravariant operation, and  $\gamma, \kappa, \epsilon$  are respectively the group-like operator, abelian operator, and unital magma (see [HSpI], definition 5)

Let  $\mathfrak{S}$  be a component of a  $\beta$ -reduced Postnikov system which kills  $\mathfrak{B}$  at  $\text{ho}(\mathfrak{Q})$ , and  $\mathfrak{Y}$  the Finsler geometry about a distinguished partner of  $\mathfrak{S}$ . Write  $\mathfrak{Y}$  as the symmetric difference:

$$(\mathfrak{S}|_{\mathfrak{Q} \times \mathfrak{Q}}) \Delta \mathfrak{S}^\#$$

**Definition A.1** A *replica* of a covering scheme at a site is a second countable model whose gaps are preserved under homothety and inversion. A *perfect replica* is the target of an invertible map from a perfect set with no gaps, and a *maligned replica* is a replica which introduces gaps and is non-invertible.

**Lemma 1.1.0** For distinct non-trivial  $\mathfrak{S}, \mathfrak{S}'$ , there is a thin equivalence<sup>1</sup> of the form  $(\mathfrak{S}/\mathfrak{S})^{\mathfrak{E}} \mathfrak{S}'$ , where  $\mathfrak{S}'$  is a maligned replica  $\mathfrak{S}^b[\mathcal{M}^{z/p}]$  of  $\mathfrak{Y}$ .

**Proof** Select some Woodin cardinal  $\mathcal{I}$  with a finite normal subgroup consisting of the  $d$  smallest primes above  $\aleph_{\mathfrak{B}}$  for

<sup>1</sup>See [Thin1] and [Thin2] for context

B a positive integer bounded above by a small member of  $\mathbb{Z}$ . We have that  $\mathfrak{S}/\mathfrak{S}$  corresponds to a set bounded by  $\wedge \mathfrak{S}|_{\mathfrak{S}}$  by taking the quotient:

$$\coprod_{z/p} \mathfrak{Q}x\mathfrak{Q}.$$

Allowing  $\mathfrak{S}^\#$  to be a coherent topos lifted from  $\text{spec}(\mathbb{Z})$ , we obtain some  $\mathfrak{Y}$  consisting of a single transcendental number  $\mathfrak{k}_{\mathfrak{B}+\mathfrak{z}}$ . That  $\mathfrak{S}'$  is maligned follows from the fact that  $\mathfrak{S}, \mathfrak{S}'$  are distinct and non-trivial, and therefore non-invertible. A non-cancellable gap is introduced at  $\mathfrak{k}_{\mathfrak{B}}$ , which is the principal connection for  $\mathcal{T}^m$  the discrete cover of  $\mathfrak{Y}$ .

Finally, we may rewrite:

$$\pi_{p-1}(H(\mathfrak{S})) \wedge^* \rightarrow \pi_{p-1}(H(\mathfrak{S})) \rightarrow \mathfrak{S}'$$

as

$$\mathfrak{Y} \cup \mathfrak{S} \rightarrow \mathfrak{S} \setminus^* \rightarrow \mathfrak{Y} \setminus \beta$$

which kills  $\pi_{p-1}$  at  $\pi_p$ .

Q.E.D.

Next, we define a proper homomorphism  $K \rightarrow K$  from some  $k$ -level object to its successor as an operand<sup>2</sup>. Write

$$\mathfrak{a} \circ_{\varphi} \mathfrak{a}-\varphi$$

to mean the successor function laid about at the beginning of this document. This is a maximally generic and lossless procedure which acts continuously on the spectrum of any specified ring. For the discrete operand, we can restrict  $\varphi$  to  $\varrho$  to produce a transitive binary relationship while neglecting to require that our image in **Set** is either abelian or group-like.

In this case, we will write

$$\mathfrak{a} \circ_{\varphi|_{\varrho}} \mathfrak{a}-\varrho$$

and obtain that every automorphism takes place over  $\mathfrak{S}^b$ , such that  $\mathfrak{a}$  is synonymous with  $\text{crit}(\pi(\varphi.k))$ . To show that this function is indeed a homomorphism, one need only consider that  $\mathfrak{a}$  is bijective with  $(\mathfrak{a}+\mathfrak{b}).t$ , such that every type of ascent produces

<sup>2</sup>The term "operand" is used here instead of operad to distinguish this construction from that of May's original operads; they correspond more closely to the "little  $n$ -cubes" operad in specific, or to the simplifications of permutahedra.

exactly one join and meet, and thus, it follows that this is a Boolean algebra.

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## References

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- [HSpI] T. Cutler [H-Spaces I](#) (2020)  
[Thin1] R. Schindler, P. Schlicht *Thin Equivalence Relations in Scaled Pointclasses* (2010)  
[Thin2] G. Hjorth [Thin Equivalence Relations and Effective Decomposition](#) (1993)