Unveiling The Illusion of Free Choice

- 'Short Odesys Story' -

Imagine you're planning a trip with four friends. Several destinations are on the table: city A, B, C or D. They decide to vote, each freely choosing their preferred destination. But after the first round, it turns out each person has picked a different place. The result? No majority, and the trip seems impossible. One of the friends proposes going to city C. He has good contacts at a travel agency he's booked with before and promises he can arrange an attractive discount. A second vote follows. Two out of four now choose city C, while the others stick with city A and city B. The majority rules—because that's democratic, say the supporters of city C. But the others disagree and suggest a sociocratic approach—based on the principle of consent. During the discussion, an objection is raised: city C can only be reached by plane, and one of the friends refuses to fly. What's more, the promised discount is no longer available and all flights to city C are already fully booked. Alternative transport is not an option, as city C is on a remote island that's unreachable within the planned travel period.

Now what? Are they still going on a trip together? Or does voting 'democratically' lead to tuning out instead of tuning in? Will they miss the opportunity to travel as a group? What if, instead of starting by choosing a destination, they had first shared their individual preferences, goals, and limitations? And what if, based on this information, they had looked for the best-fitting solution? Might it have been possible to put together a journey that is satisfying for everyone? But how do you go about that? Perhaps a trip where they spend a few days together in cities A, B, and D—now that city C turns out to be physically unfeasible. Or maybe even a trip to city E, by revisiting and adjusting the constraints?

The fundamental issue in group decision-making lies in the misconception of the allegedly free choice. While a free choice may appear to exist, it is often confined to a limited set of curated options[1]— a subset that is frequently biased or externally composed, and therefore merely an illusion of free choice. As a result, arriving at a decision that truly represents a best fit for a common purpose becomes impossible, as participants are effectively veiled by this narrow subset. To make such a best-fit outcome possible, the group must move beyond this limited set of solutions and explore the full scope of the solution space relevant to the actual problem at hand. Failing to do so means missing out on the opportunity to reach a common ideal within reach.

To avoid the pitfall of the allegedly free choice, a truly open decision-making process begins with mapping out 'what you want' — the intention (individual preferences and interests) — and 'what is possible' (the physical possibilities), rather than immediately focusing on a proposed solution. What may initially seem like a free yet suboptimal choice can, in retrospect, be transformed into a deliberately composed, optimal synthesis. This synthesis combines free will — individual preference per objective and interest — with physical degrees of freedom — physical behaviour as a function of design variables and constraints. In this way, decision-making becomes a game of freedom, equality, and togetherness in search of the best possible solution — rather than a process of decision-enforcement[1] based on a preselected, often biased, alternative.

---

[1] Imagine asking a travel agent for a European cultural trip, only to be offered a choice between Milan or Rome. This is a form of **decision-making by enforcement** through '**curated options**' — potentially excluding far more fitting destinations such as Riga, Sofia, or St. Petersburg. Or imagine sitting in a Dutch restaurant, faced with a menu offering only potatoes with spinach or with Brussels sprouts. What would you choose just before running a marathon? Or would you ask the chef if they could prepare a pasta carbonara instead? It's like giving a baby a dummy: they're being 'fooled in plain sight', yet the sucking brings temporary comfort. But when the baby is truly hungry, they will cry out — prompting the mother to generate the real solution.

As a result, it becomes genuinely possible to find, within the full solution space, the group decision that best fits and holds the highest preference value. Preference is, after all, the only relevant parameter in decision-making: the measure that determines which choices are most valuable. Moreover, preference reflects the degree of 'satisfaction' or 'well-being' — a uniquely human experience shaped by both external perceptions and internal feelings through all our senses[2].

The question now is how to achieve the highest group preference value along with a realistic alternative. By aggregating the preferences of all stakeholders per objective in a group decision-making process and integrating these with the system's physical performance and degrees of freedom, we can determine the group optimum within a socio-physical constraints framework — representing a pure form of collective maximum value creation, arising from individual free will within a socially equitable and physically feasible context.

This open design systems (Odesys) approach corresponds with an open preferendum rather than a traditional closed referendum. To support this preferendum-based decision-making, Odesys has developed the Preferendus. This enables genuine decision-making and breaks through the illusion of democracy and its so-called free choices, moving towards an open diacracy.

Let us now return to the travel problem introduced earlier to illustrate this approach. To solve it, the four men would first specify their preferences ("interests"), objectives ("goals"), design-decision variables ("degrees of freedom"), and constraints ("boundary conditions"). A possible set of travel performances, expressed as objectives, is:

(1) Cultural richness – unique value through museums, monuments, and art;
(2) Nature experience – unique parks and nature-based activities enrich the experience;
(3) Weather – climate influences both experience and activities;
(4) Travel distance – travel time determines the net time spent on location;
(5) Budget – costs vary per city.

The four men then indicate their preference and importance per objective. This importance is distributed within an equal weight allocation of 25% per person. Within this 25%, each individual can assign a weight to each aspect, or indicate that a particular aspect holds no relevance for them. By introducing constraints, such as a maximum budget, a total travel duration, or a maximum (local) travel time, they collectively define the solution space. All possibilities within that space are acceptable to them; everything outside is excluded, thereby implicitly integrating the consent[3] principle from the beginning. Finally, three design-decision variables are defined to model the length of stay in cities A, B, and D (city C and possibly other cities fall outside the solution space). Odesys' Preferendus – based on IMAP[4] optimisation – then determines, in one step, the best-fit alternative with the highest aggregated group preference within the 'limited' solution space.

---

[2] This refers to perceptions via our **twelve senses**, which are not only external (such as sight, hearing, and touch) but also internal, such as the senses of balance, temperature, and movement, as described by, among others, Albert Soesman.

[3] **Consent principle**: a decision-making principle whereby proposals proceed as long as there is no overriding objection.

[4] **IMAP** stands for *Integrative Maximization of Aggregated Preference* and is a state-of-the-art preference-performance-based optimisation method that outperforms existing multi-objective optimisation methods by integrally connecting subjective preferences and objective performances within a single decision space, and is based on a mathematically rigorous foundation.

A first example outcome is a tour of: 3 days in city A, 2 days in city D, and 5 days in city B (within a 10-day trip). The result is a feasible solution that surprisingly fits the group as a whole – *a best-fit for common purpose* – where everyone is satisfied and no one is left behind. Their conflict of interest has been optimally dissolved, and the four men set off on their journey!

This preferendum-based approach using Odesys' Preferendus represents a paradigm shift in decision-making. The illusion of free choice — often limited to a set of curated options — is replaced by intentional design from a neutral space of 'infinite' freedom, where idealism and realism are united from the beginning. Freedom lies within a shared and feasible solution space, not in the allegedly free choice itself. By consciously exploring 'freedom' — as a synthesis of individual and systemic freedom — an initial *creative conflict-of-interest* can be confronted and transformed into a best-fit solution.

A closed referendum places options side by side and 'counts the votes': an illusion. An open-design preferendum brings preferences together and 'bridges the differences' into a shared, best-fitting solution. Where a bookkeeper places things beside each other and one below the other, a designer goes a step further: they solve the problem integratively by, *with*, and *for* each other. Pure decision-making, in this way, becomes a game *of*, *with*, and *for* each other. A problem is only truly solved when you are collectively freed from it. Real space for the best solution only arises when you dare to let go of your own solution and make maximum use of the available space ('from resolve to dissolve'). You can only score if you're not offside, keep the ball within the lines, and seek the maximum free space in between.
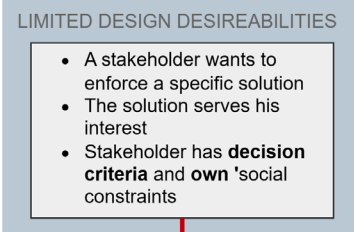
Striving for an ideal points the way toward a solution; locking in a fixed goal as something that must be achieved imposes constraints and limits the freedom to find the best solution. Odesys aims for a feasible outcome that maximally satisfies all stakeholders. This is not a compromise, but a synthesis: a best fit for common purpose. The human-centered design approach of Odesys goes beyond pseudo-democratic principles like "majority rules" or "leave no one behind," and embraces the values of freedom (will), equality (worthiness), and brotherhood (value) as the foundation of a pure, direct form of democratic decision-making. This is how plans are forged: a best-fit decision that aligns the interests of all involved, starting from a position of equality, within the 'free space'—without being offside, and aimed at the whole. Pure decision-making through an open design systems approach: *decidedly an art*.

Below is a schematic comparison of the traditional referendum approach ('decision enforcement') and the Odesys Preferendum approach ('decision-making') [5].

---

[5] Note that **MCDA** stands for Multi-Criteria Decision Analysis, **MODO** stands for Multi-Objective Design Optimisation, and **TOM** stands for Trade-Off Matrix

TRADITIONAL
('Decision enforcement - referendum')

LIMITED DESIGN DESIREABILITIES

- A stakeholder wants to enforce a specific solution
- The solution serves his interest
- Stakeholder has **decision criteria** and **own** 'social constraints'

This stakeholder drafts a (feasible) plan, possibly aligning it with a limited number of other stakeholders

Only a limited set of own preferred alternatives is worked out

Only the **curated** preferred alternatives are presented to the other stakeholders. **Which of these** is the best?

'multi-criteria analyse'
(MCDA - TOM)

Resultaat – Gaat deze variant het halen? Of moeten er nog bepaalde factoren worden bijgesteld?

One of the curated, **suboptimal** plan variants is chosen

**A curated /
sub-optimal solution**

ENGINEERING CAPABILITIES

Physical feasibility is calculated
(Design **performance** modelling & **physcial constraints**)

limited set of curated solutions only

'unlimited' set of all possible solutions

PREFERENDUS

$$\text{IMAP} = \underset{\mathbf{x}}{Max}\ U = A\left[P_{k,i}\left(F_i(\mathbf{x}, \mathbf{y})\right), w'_{k,i}\right]$$
$$g_p(F_i(\mathbf{x}, \mathbf{y})) \leq 0\ ;\ i \leq k$$

$P_{k,i}$ F_i

F_i x_n

F_1 $x_1 ; \mathbf{y}$

ODESYS
('Decision making - preferendum')

FULL DESIGN DESIREABILITIES

- All stakeholders aim to achieve certain ojectives together
- Each objective holds individual value and interest for every stakeholder
- Stakeholders have **individual preferences** and **shared** 'social constraints'

All stakeholders define their individual preference functions for their objectives of interest and assign both global and local weights
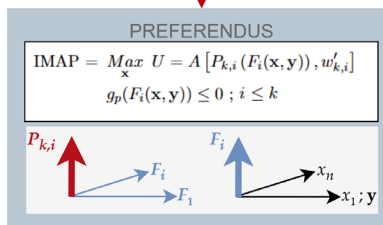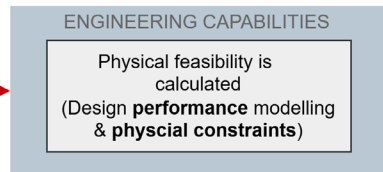
'multi-objectief ontwerp'
(MODO - IMAP)

All possible configurations are solved with the Preferendus, and the **one with the highest integrative aggregated preference** is generated

Result – 'the model talks back' Are you satisfied with this best-fit configuration? Or do certain factors still need to be adjusted?

The best fitting, **optimal** plan with the highest group preference is chosen

**The best-fit /
optimal solution**

4