W/HOLISTIC PARTICIPATORY DEMOCRACY:
AN IDEAL SOCIETAL GOVERNANCE DESIGN

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Abstract
This paper proposes the ideal design of a *W/Holistic Participatory Democracy*, based on the application of generic organizational concepts of *Biomatrix Systems Theory*.

The model distinguishes between the development of the nation as a coherent whole (*i.e. as a social organism with a unique ethos*) and the development of its different societal functions.

Based on this distinction, the model proposes different government forums and various measures that encourage a more direct participation of citizens in societal governance.

It is suggested that the people participate in national governance as equal citizens and in functional governance as expert citizens *(i.e. as members of the specific function of which they are part).* This implies that there is a general voter register *(i.e. for all citizens as equal members of society)* and functional voter registers *(i.e. for citizens that are part of a specific societal function).* Thus each citizen has two votes, a general and a function specific one.

Keywords
W/holistic democracy, systemic democracy, more direct democracy, participatory democracy, ideal democracy design, transforming democracy, transforming national governance, transforming governance of societal functions.

1 | BACKGROUND

This paper presents the ideas associated with a *W/Holistic Participatory Democracy* in overview. Being a work in progress, a more extended version of it will be published in future.

NOTE: The spelling of "w/holistic" refers to a system being an undivided whole and that the universe has a tendency to form wholes, which Smuts (1926) called holism.

Problem: Deteriorating Democratic Order

The public discourse in the Western World *(consisting of a plethora of books, analyses by political scientists, interviews with and commentaries by various experts, journalists, politicians as well as concerned citizens)* is increasingly critical of the current representative democracy model and how the democratic order is changing. Some political scientists even speak of a post-democracy. (Crouch, 2004). Problems include:

- violations of constitutional rights *(e.g. in the name of security and disaster management)*

- an increasingly state controlled and partial judiciary, public media and science

- curtailing of free speech through censorship and persecution of opinions critical of the mainstream narrative *(e.g. in the name of eliminating fake news, unscientific information and hate speech)*

- the non-transparent merging of state and corporations in governing all aspects of society *(e.g. through public-private partnerships and the involvement of lobbies in policy design)*

- the undermining of the sovereignty of nation states through policy prescriptions designed by non-elected members of trans-national organizations such as the UN, WHO, IMF, World Bank and WEF *(e.g. in the name of global security)*, as well as regional organizations like the EU *(e.g. for apparent mutual benefit of member nations)*

- the manipulation of voter behaviour through algorithms (Christiano, 2022)

(NOTE: More specific problems were identified in the context of each of the following five governance facets. These are however not included due to the prescribed lengths of the paper. They will be published later in a book on w/holistic participatory democracy.)

Prospects

Humanity seems at a bifurcation point. On the one hand current trends *(accelerated by AI)* seem to point towards a totalitarian surveillance dystopia in which powerful non-elected and self-appointed officials rule all aspects of life of an increasingly fragmented population that is forced into a global trans-humanist future.

On the other hand, there is a growing awareness of those problems and people starting to explore alternatives. This paper wants to make a contribution to this.

Solution: Ideal Redesign of the current representative democracy model

The solution for social systems that are problem-riddled is to transform them. This starts with an ideal design which can be implemented, once sufficient support for it has been generated.

Systems thinking has a long tradition of ideal system redesign, originally promoted by Ackoff (1974), whereby different approaches can be used:

- **Blank page design**
  This is a widely used method by proponents of the ideal system redesign school and is based on the instruction: "Pretend that the system has been destroyed over night and you are only left with its resources. Rearrange them within a new system."

  In the experience of the author, few people can do this, being too trapped within thinking about the current system.

- **Problem-based design**
  This is a design approach that uses the current problems of the system to jumpstart the creation of an ideal design. *The Biomatrix Design Method* (Dostal 2005a) uses this approach. It is a further development of approaches used by other systems thinkers *(e.g. Ackoff, 1974).*

  It starts with members of the system identifying current problems and their causes and brainstorming solutions for them, using a systemic brainstorming method. A design team integrates the output into alternative designs, guided by generic principles of system organization. The alternative designs are discussed with widening circles of the members of the (sub-)systems and their stakeholders to generate support and alignment. They then implement the design following an implementation plan.

- **Theory-based design**
  This approach involves applying the concepts of a theory to create a design.

  The democracy design and its terminology proposed in this paper were created by the author, based on *Biomatrix Systems Theory*. (Cloete, 1999; Dostal, 2005b).

  While the design itself is normative, its underlying theory is scientific.

  To make a theory-based design acceptable requires wide-spread stakeholder discussions and inputs.

2 | UNDERLYING THEORY

This paper is based on *Biomatrix Systems Theory*, which incorporates the key concepts of various other systems approaches and - due to unique conceptual contributions - integrates them into a coherent and internally consistent meta-systems theory (Cloete, 1999; Dostal 2005b).

 One of the contributions of *Biomatrix Theory* that is relevant for this paper is the distinction between different types of systems and their organization, namely the biomatrix, activity systems, entity systems and other system-like phenomena:

Biomatrix

The term "biomatrix" refers to the universe and all systems within it. It is both, a field of in-formation *(i.e. the conceptual reality of the universe)* and a web of interacting systems *(i.e. the physical reality of the universe comprised of inter-connected and interacting systems).*

 The two realities interact, whereby the conceptual reality of the biomatrix refers to the underlying in-formation field of the biomatrix. This field in-forms *(i.e. Latin for putting form into)* the web of systems in physical reality. Likewise, physical reality impacts on conceptual reality and changes it.

 Using the analogy of the fishing net which consists of strings and knots, one can distinguish two types of systems within the web of the biomatrix, namely string-like activity systems *(i.e. functional systems)* and knot-like entity systems *(i.e. organismic systems).*

Activity Systems

The string-like activity systems are also referred to as functions or process systems. They connect entity systems.

 An activity system is defined as a purposeful process that is structured and regulated to achieve its aim. This definition already indicates the different aspects of functional governance *(i.e. aim, process, structure and regulation, whereby the aim is derived from the ethos of the connecting entity systems).*

 Activity systems link up with each other to form continuous value / supply chains, whereby value chain refers to conceptual reality *(i.e. consisting of information substance)* and supply chain to the physical reality *(i.e. consisting of matter-energy-information substance and is abbreviated as mei).*

 The processing within an activity system produces both, intended products and often undesirable by-products (*e.g. pollution, waste, and disease*). This begs the question of who is responsible for the by-products.

 The assessment of a policy (*e.g. greenness of electric cars*) needs to consider both product and by-product supply chains (*e.g. such assessment reveals electric cars as not being "green". Sinn, 2008*)

Entity Systems

The knot-like entity systems are organismic system. Examples are a planet, society, nation, organization, person, cell and atom. An entity system is defined as

- **consisting of activity systems**; these can be outward, inward and self-directed *(e.g. a person's work function serves society, the nutrition function serves the inner cellular system and the thinking function is directed at the self)*. Governing each activity system represents FACET 1 of entity system governance.

- **emerging from the interaction of its activity systems**, whereby different patterns of interaction give rise to different kinds of development of the entity system *(analogous to different ways of intertwining strings giving rise to knots with different properties)*. This represents FACET 2 of governance.

- **being organized by an ethos** *(i.e. values, beliefs and governance principles)* **around the self** as governing agent of the entity system, whereby the system connects with itself in a self-

referring manner. This represents the conceptual *(or in-formation)* reality of an entity system and refers to *FACET 3* of governance.

- **having a core body** that has a boundary and occupies a space. This represents the physical reality of an entity system and refers to *FACET 4* of governance.

- **interacting with other entity systems** in its outer and inner environment via its outward- and inward-directed activity systems, thereby forming a containing systems hierarchy (*e.g. the planet contains societies; which contain individuals, which contain cells, which contain atoms*), which also gives rise to a governance hierarchy in which governance flows from the outer to the inner levels and vice versa. This represents *FACET 5* of entity system governance.

Other systems

Besides the above systems which *Biomatrix Theory* regards as coherent wholes, there are other system-like phenomena such as an:

- **Incomplete entity system:**
  Some entity systems are not fully developed and "alive" *(in the sense of maintaining their inner environment, being self-directed and reproducing themselves, amongst some other criteria).*
  Examples are technological systems. Through AI and biotech developments they could develop further towards becoming more complete entity systems.

- **"Mess"**
  The term "mess" was coined by Ackoff (1974) and refers to a system of interacting complex problems *(e.g. poverty, war, migration, climate change).*
  A "mess" is co-produced by the interaction of various entity and activity systems and interferes with parts of the biomatrix *(analogous to a tar-slick that clogs some strings and knots in a net).*
  A "mess" cannot be solved, but needs to be dissolved. *(See more detail under FACET 4).*

3 | FIVE FACETS OF A *W/HOLISTIC PARTICIPATORY DEMOCRACY*

A nation, being an entity system, needs to be governed according to the five aspects of entity system organization, giving rise to the following five facets of a *W/Holistic Participatory Democracy.*

FACET 1: Single Function Governance

Facet 1 involves governing each societal function through an *Executive Department* and an associated *Function Forum*.

Theoretical foundation

The nation as an entity system *(or social organism)* consists of various activity systems *(i.e. societal functions)*, namely:

- cultural functions *(e.g. science, education, media, arts, religion)*

- economic functions *(e.g. production, infrastructure, finance)*

- political functions *(e.g. legislative, executive, judiciary, diplomacy, border control, police and military)*

- ecological functions *(e.g. health-care, environmental management)*

- technological functions *(e.g. the development of technologies, applied scientific research).*

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Aims and challenges

The aim and challenge of *Facet 1* governance is ongoing functional development under consideration of both, functional as well as national requirements. This requires ideal system (re)design and systemic change management.

- **Ideal design approach**

  Establishing a w/holistic democracy will require a transformation of most of the current societal functions, which are a legacy system of the industrial age.

  The transformation of a system requires ideal system design as the first step, because what cannot be imagined cannot be created.

  Systems thinking suggests that designs are based on ideals, because they lead to continued improvement of the system. *(I.e. An ideal cannot be achieved, but can be continuously approximated.)*

  Besides having ideals as overarching aims, a design also needs to adhere to other systemic organizing principles. *Biomatrix Systems Theory* distinguishes seven forces of system organization through which the overarching ideal needs to be practically manifested in the system. Those forces are (1) ethos, (2) aim, (3) process, (4) structure, (5) governance, (6) substance *(i.e. matter-energy-information)* and (7) interaction with an outer and inner environment. Each force has its own organizing principles.

  For example, the organizing force of governance consists of three types of governance, namely form-creating governance *(e.g. rewarding performance),* form-maintaining governance *(e.g. rules that maintain and stabilize the system)* and form-destroying governance *(e.g. sanctioning undesired behavior).* The optimal development of a system requires the right balance between the three, while the wrong balance causes problems in the system, as well as impacting negatively on other systems.

  Examples of a wrong balance are the finance system, which is driven by form-creating governance *(e.g. risk and profit-driven),* while lacking form maintaining and form-destroying governance. This imbalance leads to rampant growth. Or, the education system has too much form-maintaining governance *(e.g. minimum standards, exams, rote learning)* which destroys the motivation and creativity generated through form-creating governance and therefore impacts negatively on the development of learners. Or, failing to sanction anti-social behavior or transgressions of law *(i.e. form-destroying governance)* encourages more deviant behavior in society.

- **Systemic change management**

  In the context of societal governance, systemic change management involves participatory planning, facilitated by the according *Function Forum.*

  Participative planning involves all parts *(i.e. sub-systems)* of a function to redesign the system and plan its ongoing development, under consideration of their stakeholders.

  (NOTE: Stakeholders are external systems which are impacted on by the function. They typically do not directly participate in the planning of the function and its sub-functions, but are involved in assessing the impacts of a proposed change.)

FACET 2: **National Development Governance**

Facet 2 of a *W/holistic Participatory Democracy* is concerned with the multi-functional governance of the nation. We propose a *National Development Forum* as the governance structure responsible for this.

Theoretical foundation

The development of an entity system depends on how each of its activity systems is developed, as well as how its activity systems impact on and interact with each other *(e.g. the German energy transformation seems to impact negatively on the energy sector per se, as well as the economy as a whole).*

Aims and challenges

The aim of the *Facet 2* governance is to ensure the desired functional development of the nation as a coherent whole through the appropriate development of each of its functions, as well as their optimal interaction.

Amongst others, this requires consideration of the impacts of a functional policy on other functions, whereby the considerations include proportionality and balance between functions, as well as a dual national and functional perspective of development.

- **Proportionality**
  Proportional implies that there is not excessive emphasis on one function at the expense of others *(as exemplified by the Corona measures),* or that a functional policy impacts negatively on the development of other functions *(also exemplified by the Corona measures).*

- **Balance**
  To optimize national development, the outward, inward and self-directed functions of a nation need to balance, while failure to do so thwarts national development.
  Examples are an excessive outward focus *(e.g. the involvement of the USA in wars, while there is increasing domestic poverty and decline of infrastructure);* or an excessive inward-focus *(e.g. communist countries living behind iron curtains got bankrupt);* or excessive self-direction *(e.g. the increasing controls and bureaucracy of the EU undermines the development of its member states).*

- **Dual perspectives**
  The development of a nation emerges from the development of each of its functions, as well as their interaction with each other. Thus functional planning requires a dual focus on the nation and each of its functions. What is optimal for the development of a specific function is not necessarily optimal for the development of the nation as a whole.
  National development is guided by a *National Development Plan,* based on the national ethos and mission, while functional development is guided by function-specific governance frameworks that are cascaded from the *National Development Plan*.

To generate a balanced and proportional national development involves iteration between national and function-specific planning. This involves a dual flow of governance information, namely top-down *(i.e. from the national ethos and aims via the National Development Plan into each societal function)* and vice versa, a bottom-up flow.

This dual flow of governance information is facilitated by the interaction of the different governance structures. *(See the later section on the Interaction of Governance Structures.)*

To assess balance and proportionality involves multi-functional impact assessments.

FACET 3: **National Identity Governance**

Facet 3 of a *W/holistic Participatory Democracy* is concerned with national ethos governance. We propose a *Citizens Forum* as the governance structure responsible for this facet.

Theoretical foundation

The ethos of an entity system is a part of the universal in-formation field of the biomatrix and contains the unique values of that entity system.

Ethos represents the conceptual reality of an entity system, which in-forms its physical reality. Thus its ethos shapes the form and function of the entity system.

To transform an entity system in physical reality requires a fundamental change in its conceptual reality *(i.e. ethos)*. This is achieved through ideal system design, which starts with an ethos exploration.

The ethos is focalized around the governing center or "self" of the entity system. *(NOTE: Depending on worldview, the self of a nation can be seen as the government of the nation, or the "soul" of a nation, analogous to the conscious sense of self of a person and the person's transcendent self or soul.)*

The values with which the self is most identified are its core values. However, the system also has peripheral values relating to different contexts *(e.g. function specific ethos, like parenting, work and health ethos)*. The core and different peripheral ethoses give rise to a value hierarchy, in which some values overrule others.

Aims and challenges

Most nation states are diverse and contain groups that have a different ethos *(e.g. different ethnic and other interest groups)*.

The interaction of the different groups can be a source of creativity and diversity, or conflict and even civil war. To avoid the disintegration of a nation requires that all groups identify with a national ethos *(hence the name of identity governance of Facet 3). (NOTE: Identity implies knowing who or what one is.)*

To govern a diverse system is a balancing act between integration and differentiation and involves exploring in which context unity *(i.e. integration)* needs to be pursued and in which context an emphasis on diversity *(i.e. differentiation)* is appropriate.

- Integration is achieved through having a shared national ethos *(the core of which is enshrined in a national constitution)* with which all members of the society can identify with.
  Integration is based on equality *(e.g. equality before the law, equality of access to public goods and services)*.

- Differentiation is derived from the difference in ethos between different groups, whereby ethos is expressed in language, tradition, shared history, habits, social interactions, manners and artifacts *(ranging from buildings, music, literature and art to cuisine and clothing)*.
  Differentiation is based on freedom *(e.g. freedom of expression, movement, speech)* and tolerance *(e.g. minority rights, protection of privacy)*.

Balancing integration and differentiation requires self-referral and self-reflection *(NOTE: Self-referral involves procedures that force the system to refer to aspects of itself, while self-reflection implies a conscious and deliberate self-referral that considers and chooses between alternative options.)*

If a society is too divided and conflict riddled to create unity, deliberate integrative measures, such as nation building, may be necessary. This implies involving the different groups in developing a shared constitution with which all groups can identify with, agree to and adhere to. For example, South Africa and Fiji have succeeded in deliberate nation building, while the Ukraine failed to peacefully integrate its Russian ethnic groups *(i.e. by failing to implement the Minsk agreements)*.

FACET 4: **National Integrity Governance**

Facet 4 of a *W/holistic Participatory Democracy* is concerned with governing the nation as a coherent whole in physical reality *(i.e. as a social organism within its territory)*. We propose that the *Citizens Forum* is also the governance structure responsible for this facet.

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Theoretical foundation

Using the body-mind analogy of a person, *Facet 4* is concerned with the "body" of the nation *(i.e. the nation as social organism)*, while *Facet 3* is concerned with governing the "mind" *(or conceptual reality)* of the nation.

According to the definition of entity system, this aspect of governance is concerned with the core body of the entity system *(i.e. the nation as a physical organism)*, that occupies a space *(i.e. the territory)* and has a boundary *(i.e. a national border).*

The body, space and boundary comprise the three aspects of an entity system. Without a nourishing and containing space, a body could not survive or exist and without a boundary it would not be a distinct entity, nor would it be protected against foreign invasion.

Aims and challenges

The aim of *Facet 4* is to maintain the nation and it's containing territory and border as an undivided whole *(e.g. without divisions through conflict)* and as a healthy whole *(i.e. without "disease" or unsolvable complex societal problems).*

This aspect of governance can therefore also be referred to as *National Integrity Governance.* (*NOTE: Integrity is defined as a state of being whole and undivided.)*

- **Maintaining the nation as an undivided whole**
  Maintaining the nation as an undivided whole requires

    o the resolving of conflict that manifests in physical reality within the nation *(e.g. riots and civic strife)* and conflict between the nation and other nations *(e.g. wars and sanctions).* Since physical conflict usually has an ethos component, *Facet 3 and 4* governance are interrelated. In fact, if Facet 3 governance is properly executed, physical conflict can usually be avoided

    o the securing, control and protection of the border to avoid uncontrolled migration and foreign invasion of people and goods

    o the sustainable interaction with the territory and containing planetary whole.

  The functions associated with those aims include security *(i.e. police, military)*, diplomacy, customs and excise and environmental management, amongst others.

  In terms of *Biomatrix Theory*, these functions are self-directed ones *(i.e. they serve the nation as a whole)* and are therefore the responsibility of the *Citizens Forum*. By comparison, the outward and inward-directed functions *(i.e. the economic and cultural functions, which are directed at citizens and other nations)*, are the responsibility of the *National Development Forum*.

- **Ensuring a "healthy" nation and dissolving complex societal problems**
  The root of the term health is whole. Thus creating societal health *(or wellbeing)* requires w/holistic *(or systems)* thinking.

  This thinking postulates that by creating health, all disease is dissolved. In the context of national development this implies that by creating wellbeing in the nation, its complex problems dissolve.

  While some societal problems are function-specific and can be dealt with by the according function *(i.e. facilitated by the Function Forum)*, other problems are multi-functional and span dimensions and levels. They are "messes" or systems of interacting problems that span levels and dimensions, as for example poverty.

  A "mess" cannot be solved but needs to be dissolved by changing the interaction of the "mess" co-producing systems, based on higher order logic. By analogy, the logic of getting rid

of disease differs from creating health and while there are hundreds of diseases, creating health requires only a few strategies. By creating health, all disease dissolves.

Dissolving a complex societal problem *(or "mess")* requires transversal planning. This involves planning forums that are composed of representatives of the systems that co-produce the "mess". They co-develop ideal-based strategies, which – when implemented – dissolve the "mess".

Besides dealing with existing societal problems, this aspect of governance should also deal with defining the ideals and strategies for creating national "health" or well-being through the different societal functions. They are described in the *National Development Plan*.

FACET 5: (Inter-)National Relations Governance

Facet 5 of a *W/holistic Participatory Democracy* is concerned with (inter-)national relations governance. This aspect is also the concern of the *Citizens Forum*.

Theoretical foundation

Each entity system links up and interacts with other entity systems in its outer and inner environment via its outward- and inward-directed activity systems *(or functions)*.

In the context of a nation, the outward-directed interaction is between the nation and other nations, international organizations and planetary systems, while the inward-directed relations refer to the interaction between the nation state and its citizens and their organizations.

This interaction needs to be governed, whereby different bodies of law are concerned with the systems at different levels and in different dimensions *(e.g. constitutional law, civic law, family law, trade law, international law, treaties and contracts, etc.)*.

Since systems thinking advocates the maximizing of self-governance of all system, governance frameworks and procedures need to be designed to allow the governed system as much freedom as possible and to minimize the governance exerted by systems in the external and internal environment.

Aim and challenge

Key challenges of *Facet 5* governance are the following:

- **maximizing self-governance**
  A federal structure enhances the self-governance of the systems at all levels.
  It forms a containing governance hierarchy by providing intermediate governance levels between citizens and the nation as a whole *(e.g. provincial, regional and local)*.
  It allows a dual flow of governance information, namely top-down *(i.e. from the state to the local level)* and vice versa bottom up.

- **balanced interaction of contribution and distribution**
  There should be a balanced interaction between systems at different levels in terms of their contribution and distribution.
  Through their activities the citizens contribute to the cultural, economic, political, technological and ecological "wealth" of the nation. This wealth is distributed through the structures of the state and made available as goods and services to citizens and organizations.
  The governance ideals of contribution are freedom *(e.g. of expression, speech, movement)*, that of distribution is equality *(i.e. equality before the law, and equality of access to goods and services according to need, not equal hand-outs)*.
  Contribution and distribution between citizens and the nation needs to be balanced. Unless there is contribution, there is not sufficient wealth to distribute and unless there is distribution, the individuals will lack needed resources and abilities to unfold their potential and to make according contributions.

The two dominant political ideologies of the industrial age, namely capitalism and socialism, are not balanced. Capitalism emphasizes freedom of contribution, while neglecting equality in distribution *(thereby creating inequalities in wealth)*. Socialism *(and especially communism)* emphasizes distribution and equality while curtailing people's freedom of expression, thereby limiting people's contributions to societal wealth creation.

By comparison, the social welfare states of Europe after World War 2 *(e.g. Germany and Austria)* are a successful example of balancing the two ideologies. They optimized freedom of contribution, as well as the distribution of social welfare, thereby both, the nation and its citizens prospered.

It should be the aim of a w/holistic participatory democracy to create such a balance.

4 | GOVERNANCE STRUCTURES

There is some difference in the governance structures of a current representative democracy and the proposed *W/Holistic Participatory Democracy*.

Structures of Representative Democracy

Current representative democracies are characterized by the separation into three powers *(i.e. separate and independent branches of state with different responsibilities and authorities),* namely the legislative, executive and judiciary.

The purpose of this separation is to ensure checks and balances and thereby a division of power between them. A lack of this separation gives rise to a totalitarian state.

In a federal state these powers are repeated at different levels *(e.g. state, province, local)*, to form a containing governance hierarchy.

In a democracy the citizens are supposed to have the supreme authority over their country *(i.e. as being the sovereigns)*. This would imply a bottom-up flow of governance. However, they exercise this mostly through electing representatives to the legislative, who are not directly accountable to citizens regarding specific decisions they take. Thus a representative democracy model is actually a top-down governance model.

Some countries *(e.g. Switzerland)* also allow citizens to participate directly in some decision-making via referenda and plebiscites. Other forms of citizens' participation in most current democracies are petitions, protests and participation in a public discourse. These represent a bottom-up flow of governance, although this is increasingly censored in many countries.

Structures of W/Holistic Participatory Democracy

A *W/Holistic Participatory Democracy* will maintain the fundamental governance structures of the representative democracy, albeit transforming them and adding new structures to enhance direct citizens' participation.

More specifically, based on *Biomatrix Systems Theory,* one needs to distinguish between a field-like entity system *(i.e. organisms)* and its string-like activity systems *(or functions)*. This implies governance of the nation as a coherent social organism and as a web of interacting societal functions, as well as the governance of each function. The legislative and executive governance structures are derived from this distinction.

The governance structures comprising the judiciary are not discussed in this paper, because research is still ongoing. However, an initial suggestion is to add a *Judiciary Function Forum* which should exert some controls over the judiciary system *(e.g. from the perspective of transparency),* serve as an "ombudsman" and develop alternative policy proposals and designs for reforming the judiciary system, amongst others.

Concerning the so-called fourth power of the state, namely a free media and an open public discourse, this is discussed briefly in the later section on *Public Participation by Voice*.

Legislative Structures

The legislative structures of the proposed *W/Holistic Participatory Democracy* are a *Citizens Forum, National Development Forum* and *Function Forums.*

- **Citizens Forum**

  The *Citizens Forum* is concerned with the governance of the nation as a coherent whole in conceptual reality *(Facet 3),* physical reality *(Facet 4)* and it's (inter-)national relations *(Facet 5)* and it issues according legislation.

  Decisions of strategic importance are legalized by referendum.

  The forum is also responsible for initiating citizens' participation in planning and facilitating a public discourse on all nation-related matters of strategic importance.

  The members of the forum should be directly proposed and elected by the citizens *(without intermediate and ideology based political parties)* on the basis of the ethos they represent. Ideally, the *Citizens Forum* is an assembly of the "wise" members of the nation.

  The forum is accountable to all citizens *(e.g. through transparency in its planning and decision-making).*

- **National Development Forum**

  The *National Development Forum* is concerned with

  - creating a *National Development Plan* which describes the ideal functional development of the nation as a whole *(Facet 2)*

  - prescribing the governance framework for each function, based on the *National Development Plan*, as well as the according proposals made by the *Function Forums*

  - choosing between the alternative policy proposals provided by the *Function Forums* and legalizing the one that is most optimal from the perspective of national development in terms of the aims of the *National Development Plan*, availability of resources and impacts on other functions *(e.g. based on a multi-dimensional functional impact matrix).*

  - initiating and legalizing referenda on function-related decisions of strategic importance

  - facilitating a systemic public discourse on function-related policy choices on matters of strategic importance

  The *National Development Forum* is constituted from the heads of the *Function Forums* and some appointed or elected members of the *Citizens Forum.*

  The *National Development Forum* accountable to a *Function Forum* regarding its (non-) adherence to its policy proposals. It is also accountable to the *Citizens Forum* concerning adherence to and interpretation of the national ethos and mission in all its activities and ultimately it is accountable to all citizens concerning its decisions taken, as well as the transparency in its planning and decision-making.

- **Function Forums**

  A *Function Forum* has some legislative power also. However, this power is not strategic, but only operations-related within broad frameworks and guidelines prescribed by the constitution and the governance framework provided by the *National Development Forum.*

Executive Structures

The executive structures are the *Executive Departments* and their associated *Function Forums*.

- **Executive Departments**

  Like in the current representative democracy model, the function of an *Executive Department* is to execute and enforce the laws related to a specific societal function.

    In most current representative democracies, an *Executive Department* also has the functions of making policy proposals, issuing executive orders and legislating on operational issues. In the w/holistic democracy model, those functions will be taken over by the associated *Function Forum*.

    Concerning its organizational set-up within a w/holistic democracy, an *Executive Department* needs to operate systemically. This implies that the department is transformed into a systemic learning organization. *(The Biomatrix System Design method can be used to facilitate this transformation.)*

    An *Executive Department* is accountable to the *National Development Forum* in its general execution of services to citizens *(i.e. what it does)* and to its associated *Function Forum* concerning its operations *(i.e. how it does it).*

- **Function Forums**

  Each *Executive Department* has a *Function Forum* associated with it. Amongst others, a *Function Forum*

    o exercises some supervision and control over the associated Executive Department (e.g. regarding transparency, legality of functioning and budget controls)

    o develops creative, feasible and alternative policy proposals *(i.e. creative, because they are facilitated by systemic methods; feasible, because they are based on scientific input, practical experience and resource considerations; alternative, because there needs to be a choice between policies, since the "best" possible policy option from a functional perspective may not be the "best" from a national development perspective)*

    o facilitates the participation of expert citizens in functional design and planning, based on a systemic method

    o initiates a function-specific systemic public discourse, especially amongst its expert citizens

    o initiates plebiscites amongst expert citizens on strategic issues concerning the function and

    o maintains an open and transparent systemic knowledge repository of factual information relating to the function *(i.e. as basis for decision-making and as background of and input to an informed public discourse).*

A *Function Forum* consists of representatives of each part of the function *(i.e. each sub and sub-sub-function.* Ideally, the members of the forum are recognized functional experts with practical experience, as well as having managerial and leadership qualities.

    The members of the forum are appointed as candidates and then elected by the expert citizens. The head of the forum could be elected by the forum members, or through a rotation of office. To avoid entrenchment of political power and minimize the potential for corruption, the period of service of forum members and the forum head should be limited.

A *Function Forum* is accountable to the *National Development Forum* regarding its activities *(i.e. adherence to prescribed procedures)* and policy proposals *(i.e. consideration of the National Development Plan)*, as well as to the expert citizens regarding the execution of its activities *(e.g. transparency, openness, adhering to election promises, facilitation of an industry discourse, consideration of diverse suggestions and opinions and encouraging expertise from all parts of the system)*.

Interaction of Governance Structures

The different governance structures interact with each other to ensure a continued flow of governance information through

- overlapping membership in the different forums *(i.e. the National Development Forum is constituted from representatives of the Function Forums, as well as the Citizens Forum)*, thereby ensuring the continuity of information flow from one forum to another.

- a federal structure within which membership should also overlap, whereby at each level, a forum should also have representation from the forums at the outer and inner levels, thereby ensuring a top-down and bottom-up flow of governance.

This flow represents a flow of intent and a counter-flow of feedback from existing realities and actual outcomes.

5. PUBLIC PARTICIPATION

As it is both impractical and highly unlikely that a large and diverse group of people can directly govern their shared societal systems, a democracy model will always include representation.

At the same time, in a *W/Holistic Participatory Democracy* the participation of citizens in public planning and decision-making is maximized, whereby new ways of participation can be found as the political maturity of a population increases and technological developments promote it.

Our proposed w/holistic democracy model suggests that each citizen contributes to the governance of the nation as a whole as an equal citizen *(i.e. as in the current representative democracy model)* and to the governance of the specific function of which they are part as expert citizen *(e.g. as teacher in education, as doctor and nurse in health-care, or as engineer and construction worker in road building)*.

From a practical perspective, this requires two types of voter registers, a general voter register for all citizens and a function-specific voter register for each societal function that captures the members of the function.

Public participation in societal governance can be by vote *(of representatives and in referendums and plebiscites)*, by voice *(through public discourse and a participation in planning)* and proposals.

Voting of representatives

Citizens propose *(e.g. through minimum number of signatures)* and elect their representatives directly.

All citizens propose and elect their representatives to the *Citizens Forum* directly, based on ethos *(e.g. cultural, economic and political values)* and other special interest groups and not via ideology-driven political parties.

As expert citizens they propose and elect the members of the *Function Forum* of the societal function they belong to.

Voting in referenda and plebiscites

Referenda of national strategic concern are initiated by the *Citizens Forum,* while function-related referenda are conducted by the *National Development Forum*.

The fundamental criteria for necessitating a referendum are enshrined in the constitution and more specified in an according governance framework.

All referenda must be preceded by a comprehensive and open public discourse that is initiated and systemically facilitated *(i.e. by means of systemic frameworks)* by the forum that conducts it.

Both types of referenda involve voting by all as equal citizens *(i.e. based on the general voter register).*

A *Function Forum* should call a plebiscite amongst its expert citizens to gauge support for alternative policy proposals that are of strategic importance for the development of the function, as well as the nation.

The fundamental criteria for necessitating a plebiscite are also be prescribed by a governance framework.

Voice in a public discourse

In a mature participative democracy, citizens contribute their ideas and express their opinions in an open public discourse *(e.g. via traditional, alternative and social media).*

This can only happen on the basis of the constitutionally guaranteed right of free speech. It also requires that citizens are informed by a public media that is free *(i.e. without censorship)* and fact-based, not ideology-driven.

A policy-specific public discourse also requires access to relevant information recorded in issue and function-specific knowledge repositories. Establishing a knowledge repository and keeping it updated is done by the according *Function Forum*. Those repositories need to be fact-based and contain the relevant data of all parts of the function or issue. They also need to be organised by means of a systemic framework *(e.g. the multi-dimensional and multi-level framework of the Biomatrix Method).*

Without a diverse digital and analog public discourse, a *W/Holistic Participatory Democracy* is not possible.

Voice in planning

A *Function Forum* can elicit direct participation of its expert citizens in developing policy proposals by means of public workshops, online jamming and questionnaires.

By using a systemic framework of the function and its sub-functions, experts can add their ideas in the relevant category. *(The Biomatrix Method can facilitate this.)*

Proposals

Citizens can also make proposals, petitions and protests *(endorsed by a minimum number of signatures)* about issues of their concern.

The relevant forum needs to take note of a proposal and act on it, based on criteria established in an according governance framework.

6 | REFLECTION

Reflection on theory

According to *Biomatrix Systems Theory* the current representative democracy model is fundamentally flawed, because it is essentially an entity system model. It disregards the self-governance of functions and is not accountable to expert citizens on specific functional policies.

If expert citizens participate in the governance of their system, the proposed functional designs are likely to be more informed, realistic, relevant and desirable *(i.e. from the perspective of all citizens)*. It is also likely that expert citizens' participation will counter the non-transparent functional policy development through lobbies that characterize the current representative democracy model.

What is to be done?

How do we get from the current representative democracy model to that of a *W/Holistic Participatory Democracy*?

Our proposal would be to promote w/holistic thinking and systemic design and planning methods, so that a significant number of persons will become systems thinkers and assume self-responsibility in facilitating the redesign of the system of which they are part. It is our experience that a few systems thinkers can facilitate a participative design process with people who are not w/holistic thinkers and still achieve systemic results, provided that they use a systemic method *(e.g. like the Biomatrix Method).*

Imagine, if a few members from every industry *(education, energy, health-care, media, science, jurisdiction, finance, transport, military, diplomacy, and even the local school or tennis club)* assume self-responsibility and use systemic methods to facilitate the redesign of the system of which they are part and then involve increasing circles of stakeholders in discussing, improving and widening the design and thereby changing people's thinking, as well as creating alignment around the design …. what groundswell of energy and new visions would be generated in society!

What is not imagined cannot be created!

7 | REFERENCES

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