

Young Bled Strategic Forum 2023 Mitigating our Butterfly Effect

In his article ‘Deterministic Nonperiodic Flow’ published in 1963, American mathematician and meteorologist Edward N. Lorenz explained his discoveries which, throughout the following decades, became known as “The Law of Sensitive Dependence on Initial Conditions”, also referred to as the **butterfly effect**. His mathematical discoveries, deduced upon a weather forecast experiment, were coined in the metaphor: **“When a butterfly flutters its wings in one part of the world, it can eventually cause a hurricane in another”**, and soon became an important reference in multiple fields. Applying the concept to our globalised and connected world associated through economic value chains, digital means and other networks, flutters in one part are truly felt on the other side of the globe. Our shared experience of the economic crisis, ecological devastation, wars and displacement, but also of pandemics such as Covid-19, further demonstrates how united our communities are, and teaches us important lessons in humility, solidarity and resilience-building.

Focusing on the key postulate of Lorenz’s theory, **The Law of Sensitive Dependence on Initial Conditions, determining future results is highly dependent on the starting parameters**. But what are the initial states and foundations within our societies? They can be based on history and experience which, together with our outlook on the environment and the narratives of today, determine our values, create perceptions and lead our actions. As stated by George Santayana, “Those who cannot learn from history are doomed to repeat it”. And whereas our international communities have agreed to ‘never again’ allow the same mistakes, enshrining the agreed-upon terms in internationally binding decisions, norms and rules, a war for the core of our democracies and basic humanity is being waged in all parts of the world, undermining the important lessons endured by the past generations in efforts to guarantee a lasting peace. It is therefore vital to be familiar and knowledgeable about our past, be actively engaged in the present and contribute to an inclusive and realistic representation of narratives. Furthermore, such an arena of ideas equipped with emotions and core personal values is also highly susceptible to disinformation and other activities that result in polarisation, harming the possibility for cooperation and synergies. The Young BSF 2023 thus recognises the importance of open discussions and capacity-building in the field of active citizenship and media literacy, as well as the exploration of best practices in peacebuilding and reconciliation as the tools that enable tolerance-building and understanding for the future.

In his research of the sequences and patterns in deterministic linear systems, Lorenz and his peers deduced that **making precise estimations and conclusions for the long term is extremely difficult compared to the short and medium term**. Any small differences in the initial conditions will gradually result in larger and larger divergences. As a result, according to their theory, one of the most important tasks is to find after what period of time their prediction of the future is no longer accurate and the introduction of new precise data is in order. To that end, is the foresight of our international communities, imagining our needs and goals in terms of norms such as maintaining peace and prosperity, but also focusing on challenges such as sustainable development and digitalisation, up to speed? Furthermore, how can our communities build on decisive and ambitious yet attainable long-term goals.

Finally, one of the greatest insights and inspirations in Lorenz's theory defines the **importance of small (seemingly irrelevant) events and elements**, just as individual stakeholders and organisations hold the power of great change within our international communities. The Bled Strategic Forum strongly supports young talents who carry the knowledge, boldness and courage to change the world with one flutter of their wings. The Young BSF will continue to empower and support eager young minds, still more so along the lines of activities of the 2023 European Year of Skills.

The 2023 Young BSF will be implemented as a three-day intensive capacity-building event and a forum for discussion organised at Ljubljana and Bled (Slovenia) between 25 and 28 August 2023, bringing together young professionals from a range of disciplines aged from 18 to 35. The planned programme activities will reflect on the most salient issues, challenges and opportunities within our international communities in order to **build capacity, gather knowledge and acknowledge the strength but also the responsibility of every individual (stakeholder within our societies) that can cause or prevent a tornado through decisive and responsible action. It is our shared honour and duty to mitigate our butterfly effect.**

Inspiration for Young BSF concept note

The academic community engaging in meteorology in the mid-20th century devoted time and resources to the exploration of more precise estimations and forecasts for weather patterns in order to build the capacities and theory for better prediction models and environmental disaster prevention. Edward Norton Lorenz was exploring the predictability of weather patterns and devised a mechanical experiment that followed 12 parameters of climate (temperature, wind speed, etc.) throughout time. At one point in his experiment, Lorenz entered the values of the 12 parameters in the midpoint of the cycle and ran the mechanical process, only to find later on that the values showed completely different results (referring equally to different weather forecasts and climate states). This discovery was attributed to a simplification of the initial conditions entered (values rounded to three decimals instead of the initial six). This idea leap led to the discovery of the necessity for sensitive dependence on initial conditions in deterministic systems that can amplify the values of equal dimensions to a different final state if the initial parameters are not fully repeated (to the smallest detail). The butterfly effect concept became one of the core theoretical predispositions within chaos theory and is widely referenced in both natural and social sciences in an effort to better understand unpredictability in deterministic systems.

Guiding principles of the Young BSF 2023:

1. Sensitive dependence on initial conditions (Understanding our initial conditions):

- Focusing on lessons of our shared history that should not be forgotten (contributing to important best practices on reconciliation, peacebuilding, and peacekeeping)
- Discovering how the narratives we believe, trust (and produce) in the past and today hold the momentum of initial conditions for the future
- Developing capacities through media literacy and critical thinking that build resilience towards misinformation and disinformation within our societies

2. Empowering a flutter:

- Focusing on capacity-building in the field of active citizenship, media literacy, public speaking, resilience against disinformation and other skillsets that are part of the toolbox of individual future leaders as well as the capacity of our societies as a whole
- Developing the understanding of the effects of technological advancement and innovation (AI, new media) on the creation of future professions and required skills
- Supporting equal opportunities within our societies (with a special focus on the empowerment of young generations and female leaders), countering discrimination and contributing to tolerance-building

3. Dependable forecasts for the long term

- Focusing on discussions that contribute to the creation of comprehensive long-term goals and benchmarks and discovering how the actions of stakeholders today contribute to their implementation
- Focusing on long-term commitments of our communities in connection to processes of digitalisation, the green agenda, the creation of sustainable international security and other international challenges/opportunities.