

# Democracy 2.0: Resilience and Adaptability Built on the Neuroscience of Feeling

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## Intro

Democratic forms of government, where the needs and motives of citizens are integrated into governance decisions, are preferable to monarchies or autocracies both on an individual and systems level. On an individual level, democracies allow for individuals to have rights to safety and property and freedoms to self-expression. On a systems level, democracies offer more flexible and adaptable mechanisms than autocracies for conflict management, and for generating effective solutions to complex challenges.

However, modern democracies are not living up to their potential. Modern democracies increasingly struggle to peacefully manage political conflict, generate meaningful solutions to complex problems, and resist disruption from authoritarian actors, leading to reduced public faith in democratic institutions and democracy itself. Around the world, democracies are backsliding, and authoritarian and populist leaders and movements are gaining ground.

While we may identify the problem with democracy in flaws of human nature or in the structure of democratic institutions that fail to adequately control them, an intriguing third option is emerging: The root of the problem may instead lie in a historic misunderstanding and disregard for the animating force of democracy itself—the much-maligned experiences known as feelings.

## Democracy is founded on reason

Democracy requires tolerant and deliberative behavior, and the institutions, structures and systems of incentive which secure democracy have been designed to act to secure democratic behavior through reason alone. The longstanding assumption has been that, as rational beings, when we appraise the mechanisms and structures of democracy—the design of electoral and legislative mechanisms which guard the interests of the minority against the interests of the majority, and incentives for democratic behavior and punishment for anti-democratic behavior—we will surely realize that it is in our own interest to sacrifice some of our individual priorities in service of the democratic process and public interest.

This reliance on reason alone to secure democratic behavior can be traced to a conception of the relationship between reason and feeling. In this still-prevailing view, reason and feeling are competing, incompatible, mutually exclusive, and alternative modes of experience that are locked in a zero-sum struggle. It follows from here that the tolerant and

deliberative reason necessary for effective public decision making is constantly under threat from feeling.

We all want more effective rational decision-making in public life, and we have attempted to tilt the scales in favor of reason, by insulating public decision-making from feeling. This is explicit in Federalist Paper 49, which argues that “the passions ought to be controlled and regulated by the government”, through constitutional designs which dilute passion through separation of powers and establish a high bar of consensus for major change.

## Reason gives democracy only shallow roots

This conception of reason and feeling as being inherently competitive and mutually exclusive has only recently been reconsidered. Recent research into the neurobiological and evolutionary foundations of reason and feeling indicate that, far from inherently competitive and alternative processes, effective rational decision-making depends on, and is guided and driven by, feeling.

In a pioneering study which tested the effect of feeling on rational decision-making, damage to emotion processing brain regions was found to impede, not improve, rational decision-making (Damasio and Bechara, 2005).<sup>4</sup> Individuals with and without damage to emotion-processing brain regions chose cards from between two decks. Each deck carried unknown odds of financial gain or loss, and the goal was to identify and favor the deck with better odds to have the most money at the end of the experiment. Individuals with damage to emotion-processing brain regions were significantly worse at learning which deck was preferable and rationally adjusting their behavior correspondingly. Individuals with intact emotion-processing brain regions fared far better, suggesting that effective rational decision-making requires the good function of emotion-processing brain regions.

The interdependence of reason and feeling is also evident at the level of neuroanatomy. Rational decision making is generally localized to recently evolved brain regions, namely the prefrontal cortex, while affect-processing regions are found at the base of the brain, in the brainstem, in regions which support all other brain functions. All signals from brain to body and from body to brain pass through the brainstem. Brainstem regions integrate chemical signals from throughout the body into a readout of the moment-by-moment condition of life. This readout is then used to inform functional adjustments to our processes of perception, memory, decision-making, and physiological function

to maintain “homeostasis” — a physiological state in which the many variables of life (nutrients, fluids, temperature, stress, immunological, social) are within ranges conducive to survival and flourishing (Damasio 2019; Bernard 1974; Cannon 1921).<sup>2, 3, 4</sup> Brain regions involved in rational decision-making are built out of brain regions involved in feeling.

Many of us have learned either directly or indirectly to think of the brain and mind as separate from the body — that the brain does brain things like produce a mind, and the body does body things like produce basic animalistic drives, and the more that we can insulate the mind from the animalistic drives of the body the better. However, the brain is not separate from the body. In fact, the nervous system is distributed throughout the body, and in terms of signaling it is *continuous* with the non-neural systems of the body (Carvalho and Damasio 2021; Damasio and Carvalho 2013).<sup>5, 6</sup> Interoceptive neurons are permeable to molecular and chemical signals from other major physiological systems of the body, namely the endocrine system and the immune system (Damasio 2019).<sup>7</sup> The first step to understanding the nature of any mental processes, including feeling or rationality, is to understand that the brain which produces them is fundamentally interwoven with the body. Mental processes are body processes first, and brain processes second.

In the picture that emerges, rational decision-making and feeling work together to maintain homeostasis (safety, survival, and flourishing). It works something like this: our present state of homeostasis is mentally expressed as feeling, feeling drives us to meet detected homeostatic needs, and reason helps us to select between options of behavior paths to meet those needs, based on our interpretation of our situation and context and what we have learned about how the world works and how to behave within it.

One implication of this is that our patterns of rational decision-making are constantly being adjusted and optimized for our current homeostatic needs. What is “rational” in terms of behavioral decision-making does not exist independently of our present state of homeostasis, as if in a sealed chamber, unchanging and insulated from the turbulence of life. Depending on the state of homeostasis, our mode of decision-making changes to optimize toward either long term or short-term benefit. If our homeostasis is secure, it makes sense for us to optimize our actions for the long term, to be tolerant, compromising, to value and uphold the democratic process. If our homeostasis is insecure, then we would be expected to prioritize short term aims, even if that meant anti-democratic aims, because we may not be around for long.

Clarifying the nature of the relationship of reason and feeling unravels the idea that tolerant, deliberative rational decision-making conducive to democracy requires that we be unemotional. Tolerant, deliberative decision-making is no more unemotional than reactive and shortsighted anti-democratic decision-making. Both tolerant-deliberative and reactive-shortsighted decision-making are driven by feeling and are grounded in corresponding states of homeostasis.

Both are rational strategies for decision-making; but they are optimized for, and driven by, different homeostatic conditions.

If tolerant and deliberative decision-making is not unemotional, but rather is driven by certain affective states, then democratic institutions and practices which rely on reason alone to secure democratic behavior can give democracy only shallow roots. If our mode of rational decision-making is driven by feeling and therefore is dependent on our state of physiology, an over-reliance on reason leaves democracy vulnerable to disruption at the level of feeling.

### *Modern democracy is vulnerable to disruption at the level of feeling*

Feeling can arise either naturally/spontaneously or it can be provoked. Spontaneous feelings arise from actual changes in physiological signals, such as being injured, sleep deprived, hungry, ill, over-stressed, or socially isolated. Provoked feelings arise from ideas, thoughts, memories, or external signals that *anticipate* changes in physiological conditions, and engage the corresponding physiological state to meet a set of conditions which are not actually present (Damasio 2019).<sup>8</sup>

Imagine that you experience real physiological insecurity and vulnerability, perhaps as a predictable result of a fragmented social fabric, a rapidly changing world, and limited prospects, but you are repeatedly told that your struggles are the fault of an outgroup who seek to harm. The more this message is repeated, the more you will experience it to be true (Lakoff 2004),<sup>9</sup> and the less likely you will pursue change through a cooperative democratic process with said outgroup. Instead, we feel increasingly justified in attempting to meet our needs through undemocratic means.

Assuming that this divisive message is based on misinformation or outright lies, we may call the response “irrational”, because the change in behavior is based on subjective experience and not on an objective appraisal of reality. But the fact remains that our mode of reasoning is driven by our state of homeostasis. If we are provoked into a state of insecurity or threat, our mode of reasoning changes. We either throw up our hands at the prevalence of “irrational behavior” or we update our models of rational behavior. The world we respond rationally to is the world of the interior, and not the objectively true conditions of the world around us. We did not evolve to see reality “as it is”, we evolved to see those aspects of reality which would help us survive, given our needs at the time — when our survival needs change, our modes of perception and thinking change also, guiding us towards information in our environment and behaviors that will help us meet these needs (Hoffman 2018; Damasio and Damasio 2022).<sup>10, 11</sup>

These considerations indicate that democracy, with its reliance on reason, is exceedingly and unnecessarily vulnerable to disruption through the mass provocation of anti-democratic sentiment and action. When tolerant and deliberative rational decision-making is disrupted, democratic structures and processes which depend on it can-

not function, and democracy begins to unravel. The mass provocation of cynical fear and anger can disrupt tolerant and deliberative political decision-making, not because it makes us “irrational”, but because it changes the state of our homeostasis so as to make anti-democratic behavior rational.

### Securing democracy at the level of feeling

To secure democracy against the mass provocation of anti-democratic sentiment and action, a reimagining and recalibration of democratic structures and processes is needed to secure democracy at the level of feeling. Such structures would make it more difficult for the mass provocation of cynicism, threat, anger to take hold, by actively enabling the citizenry to maintain affective and physiological states that are conducive to tolerant and deliberative rational democratic decision making. Such structures can produce, in effect, a buffer or inoculation against anti-democratic provocation.

In practice, democratic structures and processes can be deepened to secure democracy at the level of feeling by constructing additional avenues for bottom-up information flow within governance systems. Here, bottom-up information flow means an integration into the democratic process of the perspectives, needs, and interests of those without actual decision-making power.

Processes supporting bottom-up information flow can set in motion a virtuous cycle, not only by contributing to more granular and effective local problem-solving, but also by increasing individual identification with democracy, by offering an avenue for the intrinsic problem-solving motives of individuals to be realized through active citizenship. The experience of having one’s needs and perspectives integrated into governance reinforces one’s sense of belonging and mattering and identification within the political system, constructing new engines of democracy at the local level.

Creating within a population the widespread experience of identification with the democratic process can make democracy more resilient against disruption. If an individual experiences their ability to meet their survival needs and motives to be supported by the democratic system, that individual will have an interest in maintaining and improving that system. Such an experience would reinforce a sense of belonging, mattering, and identification within the political system, in effect expanding the boundaries of self-interest to include the broader democratic system, such that the vitality and ingenuity of an individual’s life process can be directed not only towards their own personal interest but also toward the interest of democracy itself. An analogous process can be seen in the literature on the predictive effect of gratitude on reciprocal prosocial behavior. When meaningfully supported in meeting their own needs, an individual’s personal interests are linked to the interests of the supporting entity (Henning et al. 2017; Fox et al. 2015).<sup>12</sup>  
<sup>13</sup> When supported by a democratic system, individuals will defend the democratic system and advance it as they

would their own interests. They will be less easily provoked to antidemocratic sentiment and action.

### Revitalizing democracy through feeling

Severing the link between feeling and democratic institutions has starved democracy of vitality and dynamism and limited its ability to rise to meet modern challenges. While some democratic energy can still be mustered by the identification of a common enemy, it is sporadic, volatile, unreliable, and insufficient to meet the challenges of the modern world.

If the roots of democratic institutions can reach the well of feeling, democracy can be revitalized in a more purposeful and sustainable way. We often think that democracy was created by reason, and while it is true that reason was necessary for the development of the institutions and structures of democracy, it is also true that reason is grounded in and driven by feeling, and that feeling is grounded in and driven by homeostasis. Felt motives for safety, cooperative survival, agency, and flourishing, have from behind the scenes driven the development of democracy all along.

Deepening democratic structures and processes to tap into feeling by building new channels for bottom-up information flow does more than make democracy more resilient, by helping people experience belonging and mattering or generate more fine-grained solutions to local issues. It also, by incorporating additional perspectives into the identification of causes and the potential for solutions, increases a democracy’s ability to respond to and tackle huge and complex problems. For any democracy to survive and flourish it must continually adapt to changing environmental conditions, it must be able to identify new problems as they emerge and new approaches to solving them. This can be done most effectively by tapping into the felt motives of citizens to build solutions for the problems that matter most to them. These felt motives not only reveal unmet needs, but they also contain the crucial activation energy needed to mobilize action to address them.

A more inclusive politics is not simply a moral aim, it is a strategic imperative for advancing the public interest. In addition to increasing the resilience of democracies to disruption through the mass provocation of anti-democratic sentiment and action, the inclusion of previously excluded perspectives in public decision-making also removes blind spots and enables new and innovative solutions to emerge. Diverse perspectives can be integrated, and political conflicts can be resolved, in the context of a recognition of the biological foundation for common needs and felt motives for safety, agency, survival, and flourishing. When the unmet needs experienced by distinct groups appear to conflict, a biological understanding of feeling allows for the tracing of both experienced needs down to core homeostatic needs. Seemingly conflicting high-level experienced needs can be resolved through identifying the core homeostatic needs which underlie them. A biological understanding of feeling

offers the first principles for a new vision of modern democracy and a framework for how it can work.

To advance this vision, a new class of mechanism linking self-directed citizen initiatives and governing institutions is proposed. These could take the form of a new kind of government/civil society hybrid organization dedicated to developing new processes for connecting citizen needs and initiatives with available channels and priorities of local governance institutions. The key would be finding the overlapping areas where citizen initiatives overlap with government priorities and available processes for their enactment. These organizations would in effect serve as a bridge between citizens and their governance institutions, reducing barriers to good governance on both sides. They would offer governments political capital and citizen-driven initiatives and would offer citizens an avenue for the realization of the intrinsic felt motives to (1) build solutions to problems that matter to them, and (2) develop a sense of deep social belonging, mattering, and responsibility to ensure the future of the democratic system. A promising model for such a mechanism comes in the form of citizen assemblies, which are sanctioned by the governing institutions. However, citizen assemblies are usually just evaluative bodies voting on predetermined policy questions. The mechanisms outlined here would be definers of policy focus areas animated and driven by the experienced needs and wants of citizens.

Civic engagement must be about more than voting. It must be about enabling homeostatic motives for survival and cooperative flourishing to direct us towards those issue-areas which have affected us and allowing our capacity for reason to guide us in developing solutions at whatever level and scale we are able, all while building deep and lasting social bonds. Citizen perspectives, ideas, and projects can inspire and inform the political discussion; and political leaders can platform and support citizen engagement; while the citizen experience of self-directed civic solution-building constructs new engines of democracy at the local level. From this basis democracy can be updated and revitalized for the modern world.

A dynamic and resilient democracy is a democracy that is guided, driven, and animated by citizen needs and perspectives. A democracy in which there are blockages and obstacles preventing citizen needs and perspectives from driving policy development will struggle to orient and adapt dynamically to the unpredictable challenges of a changing world. Building new structures and processes to unlock the generative vigor of citizen-driven problem-solving can update and revitalize democracy in the face of an uncertain and dangerous future.

### Conclusion and implications

The central implication of the present analysis is that the fundamental animating force for democratic movements can be found at the level of feeling and in citizen identification with democracy. The inexorable groundswells of popular

support for pro-democracy reforms which have driven real and lasting progress toward freedom and self-government are neither unpredictable nor inexplicable. Their natural force can be enabled systematically and reliably. Anti-democratic actors have leveraged feeling to their advantage since the beginning and now at last a framework is emerging through which the pro-democracy movement can answer in kind.

By extension, the prevalence of pro or anti-democratic feeling and personal identification with democracy offers a novel and potentially incisive indicator of the vitality and resilience of a given democracy. If our processes of reason are guided by processes of homeostasis, and if feelings offer a privileged window into our own homeostasis, then surveying feelings within a target population could offer new and useful insight not only into the unmet needs of that population, but also into the resilience of the democracy itself.

We are faced with a historically unique opportunity. Spurred in part by its own failures in recent decades to secure the consolidation of new democracies, the field of democracy promotion and assistance has seen the beginnings of a renaissance. There are strong indications that the field is seeking to learn from past mistakes, challenging old assumptions, and incorporating interdisciplinary models of human experience and behavior. The recent discovery of affective and physiological foundations of rational democratic decision-making offers just such an opportunity. By deepening the roots of democratic structures and processes to act below the level of reason alone at the level of feeling and homeostasis, we can protect democracy against backsliding, recover the dynamism and vigor of an active citizenry that has always been democracies central advantage, and mark a new chapter in our world historic experiment in self-governance.

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