Selfing Aesthetics™

A Biocognitive Model for Recontextualizing Surgical Transformation Within the Meaning-Maker's Signaling Body

Mario E. Martinez
Biocognitive Science Institute
bsi@biocognitive.com

Working Paper Series in Biocognitive Science
WP-2026-04 | Archived 2026

Citation

Martinez, M. E. (2026). Compensatory Complexity: A Biocognitive Interpretation of Longevity. Working Paper Series in Biocognitive Science, WP-2026-04. https://www.biocognitiveculture.com/working-papers-archive

Premise

Selfing Aesthetics™ is a theoretical and clinical framework developed by Mario Martinez, grounded in biocognitive science. It proposes that body image is not a static perceptual artifact, nor merely a psychological representation of appearance, but a meaning-organizing, biologically consequential signaling system embedded within the organism's regulatory biology.

The body, as lived and interpreted, functions as part of the meaning-maker's signaling system. It continuously organizes identity, self-valuation, social expectation, and adaptive readiness through integrated psychoneuroimmunological pathways. In this model, body image is understood as a biocognitive body schema: a temporally encoded, meaning-laden system shaped by personal history, cultural aesthetics, embodied emotional memory, and the social responses that have accompanied the person's physical form.

Surgery changes morphology; the organism continues to regulate from previously encoded meaning unless that meaning is recontextualized.

Plastic and reconstructive surgery can successfully alter physical structure. However, the patient's biocognitive body schema does not automatically reorganize in response to anatomical correction or aesthetic enhancement. A change in form does not by itself alter the meaning-system that has lived with, adapted to, defended against, or identified through that form.

Selfing Aesthetics™ addresses the gap between surgical correction and the patient's capacity to biologically and experientially inhabit that correction.

Core Mechanism: Temporal Encoding and Recontextualization

The central mechanism of Selfing Aesthetics™ is temporal persistence of meaning.

A patient who has lived with facial distortion, obesity, disfigurement, asymmetry, scarring, or other body-based conditions does not carry only a visual memory of the body. The patient carries a temporally encoded body schema organized through repeated experiences of self-recognition, social mirroring, stigma, adaptation, protection, hope, shame, resilience, and self-valuation.

When morphology changes, this body schema may continue to signal from its prior configuration. The person may look different to others and yet continue to regulate, perceive, and evaluate the self through an older identity structure. The issue is not psychological resistance. It is biocognitive continuity.

Recontextualization refers to the reorganization of historically encoded body meaning within the patient's current physical form. It does not erase prior experience. It relocates that experience within a new meaning horizon so that the patient can inhabit the transformed body without remaining regulated by obsolete identity signaling.

In this sense, Selfing Aesthetics™ is not a model of adjustment after surgery. It is a model of biocognitive recontextualization before and after surgical transformation.

The Neglected Component in Surgical Practice

Current surgical protocols do not include a formal method for recontextualizing the patient's body schema.

Plastic and reconstructive surgery has advanced considerably in technical precision, aesthetic planning, tissue restoration, functional repair, and patient-reported outcome measurement. Yet the meaning-maker's signaling body image remains a neglected component. Surgical practice can correct the structure of the face or body while leaving unaddressed the interpretive system that has organized identity around the prior morphology.

This omission is especially relevant in patients whose physical condition has carried long-duration meaning, such as:

- Craniofacial distortion or reconstruction
- Post-traumatic disfigurement
- Breast reconstruction
- Massive weight loss after bariatric surgery
- Body contouring following obesity
- Congenital or developmental anatomical difference
- Aesthetic interventions pursued after years of low self-valuation or body shame

In these cases, the body has not merely been seen; it has been lived. It has organized social expectations, relational confidence, threat sensitivity, self-protection, and future possibility.

Without biocognitive recontextualization, prior identity signaling may persist after technically successful surgery. This persistence can produce outcome variability despite optimal surgical execution.

Clinical Consequences of Non-Recontextualization

The absence of a structured method for recontextualizing the biocognitive body schema can lead to several clinically relevant consequences:

- Persistent identification with the pre-surgical body despite anatomical correction
- Delayed embodiment of the new physical form
- Post-operative dissatisfaction despite technically successful outcomes
- Misalignment between objective surgical result and subjective patient-reported outcome
- Identity incongruence following reconstructive or aesthetic transformation
- Continuation of low self-valuation after positive morphological change
- Behavioral or emotional patterns that undermine full integration of the surgical outcome

This last point is clinically important. A patient may receive a positive morphological change yet remain organized by a prior meaning structure of defectiveness, shame, invisibility, or diminished worth. What appears as self-sabotage may be better understood as persistence of an uncontextualized signaling system. The organism continues to regulate according to the old body meaning even after the body has changed.

Selfing Aesthetics™ therefore reframes post-surgical dissatisfaction not as vanity, resistance, or unrealistic expectation alone, but as a possible failure of biocognitive integration.

Conceptual Foundation

Selfing Aesthetics™ is anchored in a meaning-centered biocognitive paradigm. Within this paradigm, perception, emotion, and physiology are not separate domains but co-regulating dimensions of lived experience. The organism does not respond merely to physical structure; it responds to the meaning assigned to that structure.

Body image operates across three integrated dimensions:

1. **Biocognitive construct** Body image is organized through interpretive perceptions of time, health, aging, beauty, self-worth, and social belonging. These perceptions influence stress regulation and adaptive capacity.
2. **Temporally encoded body schema** Body image is shaped by lived history. It carries the cumulative effects of stigma, admiration, rejection, adaptation, protection, cultural ideals, and embodied emotional memory.
3. **Psychoneuroimmunological signaling system**Body image participates in physiological regulation. Meaning, perception, and emotional tone influence neuroendocrine and immune pathways, including stress responsivity, inflammatory tone, and immune modulation.

Selfing Aesthetics™ integrates established findings from body image research, surgical outcome studies, and psychoneuroimmunology into a unified, clinically actionable framework.

Its unique contribution is the operationalization of body image integration as a biocognitive signaling process with measurable physiological correlates.

The Selfing Aesthetics™ Model

Selfing Aesthetics™ introduces a structured pre–post surgical integration model designed to align anatomical transformation with biocognitive recontextualization.

The model includes three domains:

1. Biocognitive assessment
2. Biocognitive recontextualization protocol
3. Longitudinal reassessment

Together, these domains provide a method for evaluating, guiding, and measuring the patient's capacity to inhabit surgical change at the level of meaning, identity, and biological regulation.

1. Biocognitive Assessment

Centenarian Consciousness Index (CCI)

The CCI operationalizes the patient's meaning-based regulatory system, extending beyond conventional body image measures.

Within Selfing Aesthetics™, the CCI is used to evaluate interpretive and emotional variables relevant to surgical integration. These include perceptions of time, health, aging, self-valuation, and adaptive possibility, along with emotional expansion variables such as gratitude, curiosity, admiration, and relational engagement.

The CCI is not used merely as a psychological questionnaire. It functions as an index of the patient's interpretive system: the meaning-maker's pattern of assigning significance to the body, the self, and the future.

In the context of aesthetic and reconstructive surgery, the CCI helps identify whether the patient is likely to integrate surgical change as expansion, repair, possibility, or whether prior meanings of defectiveness, shame, threat, or diminished worth remain dominant.

GlycanAge

GlycanAge provides a downstream index of inflammatory and immune regulation, which is known to be sensitive to perceptual and emotional states through psychoneuroimmunological pathways.

GlycanAge assesses biological age through IgG glycosylation patterns, reflecting immune regulatory state and inflammatory bias. Within Selfing Aesthetics™, it is not presented as a cosmetic biomarker or as a direct causal proof of psychological change. Rather, it serves as a biologically relevant marker of systemic regulation that may reflect shifts in inflammatory tone associated with improved biocognitive coherence.

The role of GlycanAge is therefore precise: it provides a measurable biological correlate that can be tracked alongside changes in the patient's interpretive and emotional system.

2. Biocognitive Recontextualization Protocol

The Biocognitive Recontextualization Protocol is a structured intervention designed to realign the patient's signaling body schema with post-surgical morphology.

Its purpose is not to persuade the patient to like the surgical result. Its purpose is to help the organism reorganize prior body meaning so that the new physical form becomes inhabitable at the level of identity, emotion, and physiological regulation.

The protocol includes three core functions:

Perceptual Recontextualization

Perceptual recontextualization helps the patient relocate prior body narratives within a new temporal horizon. The patient is guided to recognize that prior embodied experience remains part of personal history, but no longer needs to serve as the dominant regulator of current self-recognition.

This is especially important for patients whose prior morphology has shaped their social expectations, relational confidence, and self-protective behaviors.

Emotional Expansion

Emotional expansion activates biocognitively protective emotional states such as gratitude, curiosity, admiration, and relational openness. These emotional patterns are not treated as positive thinking. They are understood as regulatory states capable of modifying stress tone and supporting adaptive physiology.

In surgical integration, emotional expansion allows the patient to approach the transformed body not as an object to be judged, but as a new field of lived possibility.

Embodied Integration

Embodied integration facilitates lived engagement with the new physical form. The goal is for the transformed morphology to become the operative reference point for self-recognition, movement, social participation, and future orientation.

The patient is guided to inhabit the new body through structured practices that align perception, emotional tone, and behavior with the current morphology.

Phases of Implementation

Selfing Aesthetics™ is implemented in two primary phases.

Pre-operative Phase: Anticipatory Recontextualization

Before surgery, the patient is assessed for dominant body meanings, self-valuation patterns, expectations, fears, and interpretive rigidity. The purpose is to prepare the organism to receive morphological change without defaulting to prior identity encoding.

This phase helps identify patients at risk for post-surgical dissatisfaction, delayed embodiment, or persistence of low self-valuation despite positive physical change.

Post-operative Phase: Consolidation of the New Body Schema

After surgery, the protocol focuses on stabilizing the new body schema as the dominant signaling framework. This includes recontextualizing pre-surgical meanings, reinforcing self-recognition in the transformed form, and supporting emotional expansion during recovery and social re-entry.

The post-operative phase is especially important because social feedback may change before internal identity has reorganized. Patients may receive positive external responses while still regulating from prior body meaning.

3. Longitudinal Reassessment

Selfing Aesthetics™ includes reassessment at approximately six months post-intervention using both the CCI and GlycanAge.

The reassessment evaluates:

- Shifts in interpretive perception
- Changes in self-valuation
- Emotional expansion capacity
- Degree of embodiment of the new form
- Alignment between surgical outcome and lived identity
- Biological age and inflammatory regulatory markers

This longitudinal structure allows surgical transformation to be evaluated not only by visible outcome but by the patient's capacity to inhabit the result as an integrated biocognitive reality.

Operational Hypothesis

Selfing Aesthetics™ posits that surgical outcomes are optimized when anatomical transformation is matched by recontextualization of the patient's meaning-based signaling system.

When recontextualization occurs:

- The biocognitive body schema reorganizes around the current morphology
- The patient's lived identity becomes more coherent with surgical transformation
- Stress signaling may decrease as perceived and actual form become aligned
- Emotional expansion supports adaptive regulation
- GlycanAge may provide a downstream indicator of improved immune modulation and inflammatory tone

When recontextualization does not occur:

- The organism continues to signal from a prior identity state

- Low self-valuation may persist despite positive morphological change
- Patient-reported outcomes may diverge from surgical success
- The full adaptive potential of the intervention may remain unrealized

Clinical Proposition

Selfing Aesthetics™ addresses the gap between surgical correction and the patient's lived capacity to biologically and experientially inhabit that correction.

This proposition reframes plastic and reconstructive surgery as more than anatomical transformation. It situates surgical change within a broader biocognitive process in which form, meaning, identity, and physiology must be brought into coherence.

Positioning

Selfing Aesthetics™ is a biocognitive integration framework for plastic and reconstructive surgery. It is not a psychological adjunct, a cosmetic coaching method, or a general wellness protocol.

It extends surgical care into the neglected interface between morphological change and the meaning-maker's signaling body.

For advanced surgical practices, Selfing Aesthetics™ provides a method for moving beyond structural correction toward whole-system integration. The surgical result is not only visible. It becomes embodied, regulatory, and biologically consequential.

The model is designed for high-level plastic and reconstructive surgery settings seeking to improve patient-reported outcomes, reduce post-operative incongruence, and support deeper integration of technically successful interventions.

In this framework, the question is not only whether surgery has changed the body.

The deeper clinical question is whether the meaning-maker has been recontextualized to inhabit the change.

References

Cash, T. F., & Smolak, L. (Eds.). (2011). *Body image: A handbook of science, practice, and prevention* (2nd ed.). Guilford Press.

Cindrić, A., Krištić, J., Martinić Kavur, M., & Pezer, M. (2021). Glycosylation and aging. In *Advances in Experimental Medicine and Biology* (Vol. 1325, pp. 341–373). Springer.

Fingeret, M. C., Teo, I., & Epner, D. E. (2014). Managing body image difficulties of adult cancer patients: Lessons from available research. *Cancer, 120*(5), 633–641.

Fingeret, M. C., Yuan, Y., Urbauer, D., Weston, J., Nipomnick, S., & Weber, R. (2012). The nature and extent of body image concerns among surgically treated patients with head and neck cancer. *Psycho-Oncology, 21*(8), 836–844.

Franceschi, C., Garagnani, P., Vitale, G., Capri, M., & Salvioli, S. (2017). Inflammaging and 'Garb-aging'. *Trends in Endocrinology & Metabolism, 28*(3), 199–212.

Greto, V. L., Cvetko, A., Štambuk, T., Dempster, N. J., Gillies, R. S., Tomlinson, J. W., Sgromo, B., Geremia, A., & Arancibia-Cárcamo, C. V. (2021). Extensive weight loss reduces glycan age by altering IgG N-glycosylation. *International Journal of Obesity, 45*(7), 1521–1531.

Grogan, S. (2021). *Body image: Understanding body dissatisfaction in men, women and children* (4th ed.). Routledge.

Gudelj, I., Lauc, G., & Pezer, M. (2018). Immunoglobulin G glycosylation in aging and diseases. *Cellular Immunology, 333*, 65–79.

Irwin, M. R., & Slavich, G. M. (2017). Psychoneuroimmunology. In J. T. Cacioppo, L. G. Tassinary, & G. G. Berntson (Eds.), *Handbook of psychophysiology* (4th ed.). Cambridge University Press.

Jylhävä, J., Pedersen, N. L., & Hägg, S. (2017). Biological age predictors. *EBioMedicine, 21*, 29–36.

Kiecolt-Glaser, J. K., Derry, H. M., & Fagundes, C. P. (2015). Inflammation: Depression fans the flames and feasts on the heat. *American Journal of Psychiatry, 172*(11), 1075–1091.

Kling, J., Kwakkenbos, L., Diedrichs, P. C., Rumsey, N., Frisén, A., Brandão, M. P., Silva, A. G., Dooley, B., Rodgers, R. F., & Fitzgerald, A. (2019). Systematic review of body image measures. *Body Image, 30*, 170–211.

Krištić, J., Zaytseva, O. O., Ram, R., Nguyen, Q., Novokmet, M., Vučković, F., et al. (2014). Glycans are a novel biomarker of chronological and biological ages. *The Journals of Gerontology: Series A, 69*(7), 779–789.

Lauc, G., Huffman, J. E., Pučić, M., Zgaga, L., Adamczyk, B., Mužinić, A., et al. (2013). Loci associated with N-glycosylation of human immunoglobulin G show pleiotropy with autoimmune diseases and hematological cancers. *PLoS Genetics, 9*(1), e1003225.

Luppino, F. S., de Wit, L. M., Bouvy, P. F., Stijnen, T., Cuijpers, P., Penninx, B. W. J. H., & Zitman, F. G. (2010). Overweight, obesity, and depression: A systematic review and meta-analysis. *Archives of General Psychiatry, 67*(3), 220–229.

Martinez, M. E. (2001). The process of knowing: A biocognitive epistemology. *The Journal of Mind and Behavior, 22*(4), 407–426.

Martinez, M. E. (2014). *The MindBody Code: How to Change the Beliefs That Limit Your Health, Longevity, and Success*. Sounds True.

Menzel, J. E., Krawczyk, R., & Thompson, J. K. (2011). Attitudinal assessment of body image for adolescents and adults. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (2nd ed.). Guilford Press.

Pusic, A. L., Klassen, A. F., Scott, A. M., Klok, J. A., Cordeiro, P. G., & Cano, S. J. (2009). Development of a new patient-reported outcome measure for breast surgery: The BREAST-Q. *Plastic and Reconstructive Surgery, 124*(2), 345–353.

Sarwer, D. B., & Crerand, C. E. (2004). Body image and cosmetic medical treatments. *Body Image, 1*(1), 99–111.

Sarwer, D. B., & Polonsky, H. M. (2016). Body image and body contouring procedures. *Aesthetic Surgery Journal, 36*(9), 1039–1047.

Slavich, G. M., & Irwin, M. R. (2014). From stress to inflammation and major depressive disorder: A social signal transduction theory of depression. *Psychological Bulletin, 140*(3), 774–815.

Van de Grift, T. C., et al. (2017). Body image in patients with disorders of sex development: A systematic review. *Archives of Sexual Behavior, 46*, 145–159.

Vartanian, L. R., & Porter, A. M. (2016). Weight stigma and eating behavior: A review of the literature. *Appetite, 102*, 3–14.

Wee, C. C., Davis, R. B., Huskey, K. W., Jones, D. B., & Hamel, M. B. (2013). Quality of life among obese patients seeking weight loss surgery: The importance of obesity-related social stigma and functional status. *Journal of General Internal Medicine, 28*(2), 231–238.