

Peer Review Article

Subtractive Awareness:

Educator-Change Leaders Helping Transformations Happen Together

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Abstract

This paper is foremost about experiments in embodying a transformative narrative of a self that makes possible mutual collaborative practice with others. The focus is less on what we ought to think or do, but rather on subtracting, letting go, self-identities that are no longer fit for collaborative purpose. We refer to this as subtractive awareness by which we mean becoming aware of obstacles that inhibit creative action with others. In a time when dominant narratives call for endless growth, accumulation and addition, there is perhaps an overlooked value in subtraction practiced in support of collaboration. We align with writers such as Jason Hickel (2020), and practitioners in the degrowth movement to argue that in an era of perpetual expansion, “less is more.”

Keywords

action research transformations, adult vertical development, embodiment, interdependence, narrative, reflexivity, relational, power-with

Genuine power can only be grown, it will slip from every arbitrary hand that grasps for it; for genuine power is not coercive control, but coactive control. Coercive power is the curse of the universe, coactive power, the enrichment and advancement of every human soul.

—Mary Parker Follet

Introduction: Why Do We Need Subtractive Awareness?

Ours is a time of intersecting eco-social crises such as climate change, biodiversity loss, and mass refugee migration. Along with a recent re-arising of nationalism, a simultaneously globalizing yet increasingly polarizing world is appearing. Whole societies are called to transition toward new levels of inclusion at speed and scale as a post-fossil fuel era arrives. Sustainability thought leaders call this transition the Great Turning (Korten, 2007; Macy 2009), explained also as an epochal shift from industrial modernity to postindustrial metamodernity (Freinacht, 2017). To support this Great Turning, many more politicians will have to advocate for sustainable policy and many more citizens will have to live according to sustainable principles. Neither is supported by current reward systems in which, for example, price signals do not point to true costs and intergenerational justice is increasingly compromised. Neither is supported by dominant narratives that promote human separation from nature, capital accumulation, and endless growth. The global transformation that may well be technologically feasible is surely socially and culturally daunting. Political inertia continues. We need personal and collective narratives that support mutual transformation towards a next level of collaborative action at all levels of society. Our opening quote signals our attention to the particular importance of transforming the individualistic narratives and patterns of relational dominance that we have inherited.

This paper is foremost about experiments in embodying a transformative narrative of a self that makes possible mutual collaborative practice with others. The focus is less on what we ought to think or do, but rather on subtracting, letting go of, self-identities that are no longer fit for collaborative purpose. We refer to this as *subtractive awareness* by which we mean becoming aware of obstacles that inhibit creative action with others. In a time when dominant narratives call for endless growth, accumulation, and addition, there is perhaps an overlooked value in subtraction practiced in support of collaboration. We align with writers such as Jason Hickel (2020) and practitioners in the degrowth movement to argue that in an era of perpetual expansion, “less is more.”

Experimenting Together

The work described in the paper is drawn from a coLAB, i.e., a community of inquiry *and* practice that invites and supports participants to develop capacity *with* others around the world. The coLAB we describe is one of several organized

annually by the Action Research Plus AR+ Foundation. These coLABs are an extended engagement that can run for almost a year. The vignettes reported later in the paper emerged from a 2022 coLAB designed to experiment with the contributions that narrative theory and storytelling practice can make to processes of action research for transformations. Per the norms of the AR+ Foundation, a group of members conceived the coLAB and then offered an open invitation to others to participate. A dozen interested participants signed up, from the Global South (e.g., Bangladesh and Philippines) and Global North (e.g. Australia, Denmark, UK). Participants were educator change leaders who knew to expect emphasis on making meaningful experiments in their lives/work at three levels of focus, namely their own *personal* understanding of action research for transformations with an invitation to step to their developmental edge; their *interpersonal* practices with power, feedback and relationship building; and connecting to *the world* of work outside the coLAB, primarily through useful cognitive resources such as narrative (e.g., Hero/ine's journey) and research on adult development.

This coLAB may be considered part of multiple global efforts to support educator change leaders in catalyzing their own communities of students and clients to respond to the eco-social crisis of our time (Bradbury, 2022). In our era of Zoom, we see the possibility of supporting a population of educator change leaders across global boundaries.

Our Use of the Term Subtractive Awareness

The use of the term subtractive awareness first emerged from reflection as participants on our own practice, through a lens of adult development. Emerging initially from a discussion about “needing to let old narratives die,” the concept started to take shape over the months of the coLAB as we reflected on the analogous way that sculptors work with negative space, seeking to chip away what is not needed to uncover the form and beauty within. A more formal search of the literature pointed us to the use of the term in design, education, and futures studies. There the term subtractive education crops up among linguists to refer to the ‘stripping’ of Indigenous languages from children so they fit into colonized education, a practice we do not condone. We saw more overlap with work by Erin Manning and Brian Massumi (2015) who describe neurodiverse forms of experience, albeit concerned with modes of individual perception. In contrast we see subtractive awareness as relational, i.e., born from the realization of exchange among people and in turn aimed at intersubjective awareness emanating from interior attunement; it is frequently engagement with the life-worlds of others that helps us to identify of what we can (and ought to) let go. We appreciated Nassim Taleb (2012) on ‘subtractive epistemology’ when he writes that the greatest and most robust contribution to knowledge consists in removing what we think is wrong. Also, Adams et al. (2021, p. 258) who further contrast additive and subtractive changes for improving objects, ideas or situations. They challenge our social default tendency towards additive

approaches that lead to “overburdened minds and schedules, increasing red tape in institutions and humanity’s encroachment on the safe operating conditions for life on Earth” (Adams et al., 2021, p. 261). They argue further that “if people default to adequate additive transformations—without considering comparable (and sometimes superior) subtractive alternatives—they may be missing opportunities to make their lives more fulfilling, their institutions more effective and their planet more livable.” It is this questioning of default additive tendencies and the importance of considering subtraction, that we now turn to in more detail.

For us, as action researchers, the active element in subtractive awareness is useful for signaling that it takes active *practicing* to release unhelpful cognitions. While simple to understand—the idea is simply to give up an idea—it is rare for the typical mind, whose natural negativity bias orients toward adding self-protective reasoning. A common example concerns managing the tension we feel between wanting to contribute our individual expertise into a collaborative workshop and wanting to remain open to potential co-created insights that emerge when working with others. Subtractive awareness is therefore complex; it is not just cognitive in terms of acquiring facts but is concerned with a new way of being with others. Rather than adding new knowledge for the self, it transforms blindspots of cherished self-identity through dissolution, the subtraction of which invites a more creative way of being with others. This kind of awareness combines a reflective capacity (we might say ‘awareness of awareness’) with capacity for collaborative action. In the language of action researcher Bjørn Gustavsen (2014), we move from wanting, individually, to be ‘very right,’ to instead practicing being collaborative together because beneficial social impact justifies its knowledge claims.

Subtractive awareness may effectively contribute to *scaffolding* among educator change-leaders. In the context of education, scaffolding (Bruner, 1984) refers to ways in which people teach and learn to develop necessary capacities in group settings. Just as builders use scaffolding to provide support when needed, but then remove that support, so educators “need to provide temporary supporting structures to assist learners to develop new understandings, new concepts, and new abilities” (Hammond & Gibbons, 2005, p. 8). As learners develop new skills, the support can be gradually removed. For action-oriented educators and change leaders this means working to create conditions in which people gradually ‘step up’ their leadership efforts in a synergistic way.

The contribution of this paper emphasizes 1) the insights of constructivist adult development to 2) highlight the concept and practice of what we term subtractive awareness, as 3) a means for scaffolding groups in ongoing development of self and collective. The concept of subtractive awareness is therefore offered for its potential in emancipating a multiplier effect among educator change-leaders.

In linking narrative insight, adult development and collaborative action, subtractive awareness contributes to the lineage of action research with its

emphasis on integrating inquiry with action for practical impact that benefits stakeholders, human and other, more than human (Reason & Bradbury, 2001; Bradbury, 2015). There has been success before with scaffolding capacity for large populations based on action oriented developmental education, e.g., Andersen and Björkman (2017) describe the Nordic ‘secret’ of providing access to developmental and action-oriented education in the Scandinavian region. The project was state funded during the European Industrial revolution at a time when this erstwhile resource-poor region had to meet the complexities of urban modernity. It succeeded. That government funded effort made personal development opportunities available to all adults *beyond* formal school years. This took the form of popular adult education, *Volksbildung*—a derivative of the European Adult Education Institutions—an historic achievement in European welfare states. Global surveys, e.g., World Happiness report, point to the Nordic region as home to the most prosperous and happy people on the planet.¹

Subtractive awareness as we present it is practiced most effectively by advanced adult learners, i.e., those who often inhabit the role of educator and change leader. Importantly they develop this capacity after they have successfully built an identity as independent contributors (self-authoring, in the language of adult development —see below). It necessitates stepping into the unknown with others, thus requiring:

- Growing from individual expert to partners in collaborative action;
- Learning to support others in collective decision making and shared accountability;
- Entertaining perspectives diverse enough to provoke reflection and clarity about what matters most of all for us.

Next, we unpack the theory of constructivist adult development to explain what we mean by ‘advanced adult learner/change leader.’ This is followed by narratives that illustrate our work to date.

Constructivist Adult Development

Foremost in the modern approach to adult development is Jean Piaget (1962) who proposed an invariant sequence of stages through which children develop. This insight has been empirically elaborated by scholars of development in a variety of fields, as it applies also to adults, see Michael Commons, Susanne Cook-Greuter, Robert Kegan, Jane Loevinger, William R. Torbert and Ken Wilber and colleagues. Our work is anchored in the ongoing empirical study of constructivist adult development by Jane Loevinger (1966, 1976), known for her

¹ Danish action researcher Miles Horton was a key figure in linking action research from Global North with the Global South at the Highlander Center.

assessment of ego development, and the more recent work of Robert Kegan (1988). At this time of writing, as the theory emerges from its nuanced academic context into practice especially among change leadership executives, critique surrounds the explicitly stage-like conception of development. The critiques take aim at the notion that stages that emerge later in a developmental process are to be understood as hierarchically elitist.

Engaging fully with this critique lies beyond this paper. We note however the nature of development is to build on previous stages to solve new problems and therefore later stages of development *are* more capable in certain measurable ways than earlier stages of development. Yet this does not mean that later stages of development should be treated as superior. Consciousness at later stages grapples with ever new problems and fallibilities. Therefore, it's important to point to a paradox that is often overlooked by the critics. Namely, that it is only at later stages that deeper levels of human collaboration and creativity become possible (Torbert, 2004, 2020). One of the most frequently observed developmental trajectories, from Piaget onwards, is an expansion in the entities that we recognize as having value, from self to family to tribe and onwards (Cook-Greuter, 2013). This expansion of our circle of care opens new possibilities for collaboration by helping us to value more perspectives—to be less elitist. An elitist, i.e., unilateral use of power, is itself *inconsistent* with the attention of the later-stage action-logics towards collaboration and mutuality. The later action-logics, being collaborative and responsive, are the very opposite of elitist and hierarchical. Complicating matters, however, is that all people experience what Piaget also called attention to among children, named 'decalage,' i.e., shorter or longer periods of regression. This phenomenon is receiving more attention recently among adults (McCallum, 2008; Livesay, 2022). We hope our paper could be understood as a contribution to the ongoing debate by emphasizing *the practice* of non-elitist power ascribed to the later stages of development.

As a final note we remind all of us that humans are fallible, and our thinking is ridden by (unconscious) cognitive biases. A key idea in our paper is that this is perhaps most particularly so when we extract ourselves from relationships with others and eschew the *social* aspects of learning. We are after all one of the more social species on Earth. We might say then that the proof of the pudding resides in *how* we do our work, and or react to challenges that destabilize our sense of mutuality. Thus, feedback becomes critically important, both giving and receiving, within social groupings, per the norms of collaborative and responsive practices. Our work is toward collective transformation. The practices we outline are therefore aiming to be the very opposite of elitist and hierarchical while acknowledging that it is a journey of learning with others by doing.

Leadership scholar William Torbert (2004) puts the insights of decades of adult development theory succinctly by explaining that our capacity to integrate what we hold in awareness at any given time—about 'me,' 'you,' 'it/external world'—equals our stage of development or 'action logic.' As the term action logic suggests, the constructive outcome of adult development is *the reliable ability to*

bring action and inquiry together. The theory of adult development is therefore helpful in framing how transformations in individuals happen in such a way that social transformations can be supported for a world whose complexity is growing. This complexity, as Kegan (1988) argues, is beyond most of our capacity, which may explain the ever growing and linked eco-social crises we are collectively failing to grapple with and often sidestep. Empirical studies show strong correlations between psychological maturity of a person's action logic and their effectiveness in a chosen arena (Rooke & Torbert, 2005). The theory suggests that with growing personal maturity we become more and more able to 'walk our talk' which increases credibility and effectiveness of our engagement and helps transformations happen in a myriad of contexts.

To effectively pursue transformation, we argue that learners and educators need to develop capacity, simultaneously, to integrate awareness of themselves, others, and of the external world, and to act from this combined awareness for practical good. It is an awareness with relevance to how we might live more sustainably with all beings in the world we share. We know empirically that later stage organizational and personal transformation are linked (Rooke & Torbert, 2005); those who consciously practice with awareness-advancing self-development and a wider repertoire of collaboration also appear in global assessments to be rising, at least in the professional population who can invest in self-development (Barker-Hardman & Erfan, 2015; Torbert, 2020).²

The coLABs we describe are open to a self-selecting population of global action researching educator-change leaders. While it is not a requirement that participants are so called later stage, in practice 90% assess at such stages. Why this is so (effectively the inverse of the general professional population) lies beyond this paper. However, we might say that the kind of transformative action research supported by the AR+ Foundation, with its emphasis on stakeholder driven processes and inclusion of diverse populations, simply draws and then conditions practitioners in ever greater levels of complex sense-making and perspective giving. There is explicit emphasis on practicing with moving from power-over to power-with (Follett, 1924) within the community. In this action researching participants necessarily combine multiple, often paradoxical, roles—say facilitator and protagonist; analyst and collaborative planner; logician and peace maker; speaker and writer, feedback giver and feedback recipient, etc. In the coLAB context we describe there is therefore much attention on the use of

² Barker-Hartman and Erfan 2015 note that a large portion (around 30%) of senior leaders, high potential candidates and organizational consultant/action researchers profile at the redefining action-logic. This is comparable *with the first step* between Robert Kegan's stages of self-authoring and self-transforming mind. Although still a type of dependent mindset, this action logic exhibits much more questioning on its way to transformative mindset. Perhaps also interesting to note is that those measuring at redefining also report the most dislike of stage theory, with many dismissing it as elitist.

power, feedback, and collaboration, oriented with a ‘both and’ rather than either/or orientation.

The following table highlights three issues considered central to action researchers’ capacity for co-creation namely 1) the practice of receiving (critical) feedback, 2) drawing on different types of power and 3) creating experiments with collaborative action, from minimally required cooperation to co-creativity, with one another. The three stages of increasing maturity, moving from being dependent to independent and interdependent, are illustrated. Our proposition is that the practice of interdependence that characterizes later stage learners requires, or at least is facilitated by, subtractive awareness. This is not to say that subtractive awareness is only of relevance to later stage learners; all development involves letting go of the stability that comes with a familiar stage, so all learners could potentially benefit from becoming more conscious of what they might need to let go of to continue their learning journey.

Note the first row, which describes early stage sensemaking—named dependent—expresses stereotypical thoughts all of us might have, especially in conditions of uncertainty or anxiety. That our response, at this particular stage may be aggressive and/or silent may be confusing as these appear so dissimilar. Yet on closer inspection both are a response to seeing the threat as *entirely external*. Little to no inquiry is available. For this reason, it’s described as a state of dependence. In this dependence, we conform to social, frequently gendered scripts that we have been taught to deal with difficult circumstances (e.g., don’t cry, be polite). Only minimal collaborative action is possible.

Row two expresses stereotypical thoughts as more capacity for tending to our inner world becomes available. Even if we might prefer a comfortable context, we can nonetheless tolerate discomfort and still learn because we can summon inner resources say of patience or optimism or simply endurance. This later stage—we call it independence—means we have *individually* developed more access to our inner world of sensemaking. We therefore have capacity for mutually helping toward a defined goal. This is the stage of stable self-authorship.

Row three actively embraces the discomforting moments *despite* anxiety. This stage combines inner and outer resources, i.e., individual self-authorship within a safe-enough shared space. At this stage co-creativity—a step into the creative unknown with its surprises—becomes possible. The coLABs we describe are aimed at encouraging extension of repertoire into Row three and inviting later stage learners from the worlds of education and politics to practice at ever higher levels of mutual empowerment. Adult developmental theory was very present in the coLAB process because all participants completed an online developmental self-assessment early in the coLAB that offered suggestions on developmental practices to experiment with as the coLAB proceeded.

Next, we offer some real-life vignettes of subtractive awareness to illustrate how this is enacted in transformations among educator change leaders and how this relates to developmental work. The vignettes are followed by a discussion of conditions that support subtractive awareness.

	FEEDBACK	POWER	COLLABOR-ACT
Conforming (Fear)			
Requires a comfortable context, otherwise anxiety provokes (quiet) protest.	<i>I don't want to be embarrassed by you. I don't want to stand out. I don't want to care about anyone's feedback (even if I have to)!</i>	<i>My way or the highway! Leave me out of this. I do not want to get involved.</i>	<i>I have to protect myself. I demand your loyalty. I want to follow the leader. My collaboration is minimal, accords with conforming to external expectations.</i>
Independent/Autonomous (Neutral/Neutered)			
Would prefer a comfortable context but can bring sit with discomfort and still learn.	<i>Is this feedback valid? What are your credentials? How is this going to help me achieve my goals?</i>	<i>There is a right answer. Let's accomplish more!</i>	<i>I follow the data; facts tell us the right solution. I measure my value as a function of what goals I attain. Cooperation is possible if I see the value of others input.</i>
Interdependent/Relational Warmth (Love?)			
The unfamiliar discomfort is sometimes more interesting than the familiar comforts.	<i>Thank you for your feedback! All voices need to be heard. Now, how do we work together on this so all beings may thrive?</i>	<i>You lead. I want to share power. I want us to alternate different types of power: power over, power from within, power together. Let's choicefully lead, and follow, one another's genius.</i>	<i>Co creativity is possible. Can we imagine how to redesign the system together to include all voices (also those not here)? Let's learn in doing this together.</i>

Table 1. Developmental Stages of Feedback, Power and Collaborative Action, originally elaborated in Bradbury 2022.

Vignettes of Subtractive Awareness

The following vignettes are from the final ‘reflection and celebration’ session of the coLAB. Those who attended were recorded speaking about their experience of the arc of their learning journey into and through the work together. Each received a copy of their recording. Some of the original participants were absent due to struggles with Covid and/or time zone issues over what was a Holiday period. We did not include written reflections from the latter group.

The following reports were specifically prompted using sentence stems:

1. Because of my journey through this coLAB, I...e.g. encountered, learned...
2. During my journey through this coLAB, I let go of...
3. The gift I am carrying into my practice is...

Chris, a university professor who turned 50 during the coLAB, reported letting go of his previously tight grip on facilitation (something relevant to all his work with clients and students): “As one of the coLAB facilitators, I entered with a strong commitment to developing a ‘bullet proof’ session structure with detailed run sheets and abundant scaffolding. My developmental assessment encouraged me to embrace emergence and uncertainty, which prompted me to let go of my previous need for detailed facilitation structures and adopt a more open and responsive facilitation approach—not only during the coLAB but in other facilitation jobs.”

Bem, a university professor, program designer and published novelist in her 50’s reported that stepping to her developmental edge meant: “Stepping out of the sage on the stage persona”—the educator who has to be an expert, or in this case, the storyteller who has to be an expert on storytelling. “Usually, I hang out with the novelists and other storytellers. They’re my tribe, but I had to let go of the story-telling tribe and join a story-action tribe in this coLAB. In this community, I had to let go of controlling the narrative and understand how others in the action research community—not the storytelling community—used narrative. And that went well beyond simply the telling of a tale. In doing so, I learned about other uses of narrative and decentered narratives (mid-way through the coLAB participants stepped into more of a design role and thereafter everything we created together was emergent and collective.) Creating together meant feeling the ‘unity’ in community. In narrative terms, Joseph Campbell might have called it the stage of ‘atonement’ in the hero’s journey. I call it ‘at-one-ment.’ That feeling that all our stories have some sort of connective tissue—a greater unity. It was wonderful experimenting with this insight. So, the gift I take... well it’s a gift that keeps on giving!”

Meghna, a scholar practitioner and principal at a successful South Asian action research NGO in her 50’s, reported “encounter with my past in a new way and with it reflection on deep creativity with kindred souls with whom I did not expect connections. What it enables for me was the central notion of the self. I also let go of

leveraging human rationality and in our session on interspecies knowing I came to celebrate instinct again. My gift is to share this with my own organization and with other organizations we train. When we go beyond the projects what remains? The self. The self is sustained in everything we do."

Susie, a university academic in her 40's, reflects "the key thing I encountered is attentiveness to relationships and how and when they are formed. I started to see this as mycelial connective tissue becoming a mesh of roots. I let go some shame, as a facilitator, in not always arriving with evidence of my good work in the form of Miro boards etc. Instead, there was joy, serendipity and play in what was emerging."

Since the vignettes illustrate the results of subtraction, we will go deeper now into the process that supported 'stepping up' elements of the scaffolding processes.

Moving Backstage

A coLAB is best considered a 'backstage' (Goffman, 1956), used to practice for 'front stage' action research efforts outside the coLAB. Over the seven years in which coLABs have been evolving in the AR+ Foundation, the success of a coLAB involves resolving dilemmas that most organized groups struggle with, namely that individually and together, participants of a learning group (*unconsciously*) block learning through cognitive biases that give rise to learning defenses. Action researcher Chris Argyris (1990) noted how common a problem these learning defenses are, and how they rise in tandem the more academically well trained the participants are.³

Modern psychology has distinguished a variety of common cognitive biases that defend us against learning. These are variously named as framing effect, negativity bias, self-serving bias, confirmation bias, inattentional blindness, etc. There are related common behaviors increasingly familiar in society now understood to also influence economics by showing that individuals and groups make irrational decisions.⁴ These biases regularly produce problematic imbalances in inquiry versus advocacy, itself a product of confirmation bias meshed with cultural assumptions about who gets to speak and who listens. Seeing those blockages and subtracting them one by one can be successful with

³ In a personal communication to first author Argyris quipped that they're highest of all among groups of university professors(!).

⁴ Kahneman and Tversky published a series of seminal articles on judgment and decision-making in 1974 based on prospect theory that explained how we avoid risk when making decisions that offer a potential gain, and take risks when making decisions that could lead to a certain loss. Kahneman's 2011 book popularizes these notions as fast vs. slow thinking.

the imposition of new rules, such as, when brainstorming everyone is welcome and no one can be critiqued. And indeed, such rules are helpful. Still the actual practice of scaffolding a group toward maturity, namely, to see and step beyond its biases, remains rare. The emancipatory action research tradition explains that we are limited because we've been shaped by an educational system that has (over) emphasized conceptualization and analysis with too little emphasis on converging toward experimentations. So while, for example, we may know we must take action, on we talk anyway; while we know we must 'listen' (and may even congratulate ourselves for being excellent listeners), little is accomplished beyond our excellent listening. The coLAB is therefore designed to relentlessly (if gently) scaffold development through inviting participative processes to encourage each participant with their own developmental work taken into experiments.

Starting with Experience

The constructivist learning approach is action oriented and is sometimes simply called action or adult learning (Kolb, 1976). It orients from the revolutionary importance of learning from our own experience (versus looking to external authorities for external facts and figures). This was first articulated by William James to become the center of what today we call a pragmatist or consequentialist philosophy, since clarified by Kolb (1976) as a learning cycle. Experience lies also at the heart of the appeal of Freire's (1970) liberationist education which denounces a still pervasive banking model of pedagogy in which experts dole out their knowledge to eager recipients.

In action learning we are transforming experience through conceptualization *and* experimentation, thinking and doing in ways meaningful to those involved. In the reflection component, subtractive awareness becomes possible as participants see the opportunity to let go of commitments that have calcified for them or set them on unproductive routes. This reflection is quite personal and creates space for the new. Learning to choicefully let go of what had previously seemed a necessary practice is guided by listening more carefully to the authority of inner experience, supported through engagement/experimenting with collaborators. Thus, subtraction may be considered a form of seeking wholeness, of doing more with less. Per Table 1, leaving space for more feedback allows unexpected co-creativity. This is as much a relational as individual emergence, occurring as it does in the space among individuals within a larger, energetic sense of support. The relational space itself emerges through a realization that exchange (of support, ideas etc.) enables ever more creative exchange. Foregrounding the space in which a group works is a localized adaptation of Lewin's (1946) "social field" which Scharmer and Kaufer (2015) define as "the structure of relationships among individuals, groups, organizations and systems that gives rise to collective behaviors and outcomes." Thus, the quality of the relational space deserves attention.

Relational Space with a Supportive "Protainer"

In entering into a coLAB, participants are greeted by an explicit invitation to “work at the developmental edge.” Participants are further invited to take a baseline developmental assessment so that they can name that edge for themselves. Participants do not expect to be ‘teaching’ one another, except according to Vygotsky’s (1978) notion of sharing a zone of ‘proximal development,’ in which each person has the opportunity to emerge as educator around a given issue. The space is therefore fluid, participatory. The facilitators take as a primary role to convene (therefore to clarify logistics of when, where, etc.) and to be role models for how to enact a brave space. As the facilitator role rotates, they too are themselves participants.

At the start of each session participants meet guidelines referred to as ‘protainer’ enablers. ‘Pro’ suggests we do the work for our stakeholders outside of the container also. The term is informed by the psychoanalytic tradition in group relations with its understanding that people must manage anxiety. Unlike the Tavistock/T-Group tradition⁵ there is no attempt to create anxiety, but rather an emphasis on working with what is present, which may include anxiety. The enablers are therefore a set of guidelines that call one another to support a brave space of learning. The guidelines are not novel and include, inter alia, an invitation to generative pauses, to balance advocacy with inquiry, and to share feedback. Yet over the first years of the Foundation’s coLABs these simple guidelines have developed into a key ritual to remind people to drop, as much as possible, the cognitive biases that inhibit learning together. The protainer guidelines are usually introduced with a few minutes for silent settling.

Per the terms of Table 1, the guidelines invite participants to step as much as possible toward interdependence with those present. This is subtly different from, though certainly related to, the individualistic notion of ‘psychological safety.’ The brave space of a protainer aims to coproduce *mutually transforming power* through initial simple —yet profound—agreements for *the sake of what we might accomplish together*. In this way developmental reflexivity among all is invited (in Freire’s term, conscientization, i.e., consciousness raising). With this protainer operating as the backdrop relational space, different preferences for conceptualization and experimentation come into being, in what we therefore manage as a polarity of conceptual and experimental spaces.

- **Conceptual space** emphasizes coming to reframe important cognitions which may mean realizing and choicefully omitting facets of identity that no longer serve in a particular context.
- **Experimental space:** The learning space is intended to serve life outside the coLAB, but using the coLAB as a laboratory. Facilitators therefore encourage all participants to

⁵ <https://www.tavinstitute.org/>

perform/enact/prototype/try-on/embody new ideas, and to create the path by walking out of the coLAB and into one's 'real life.'

Participants report (note Meghna's words above) that *uncovering creativity means re-finding* what has been hidden by too much rationality. We see this also in Bem's return to her love of story by subtracting her control of the narrative. Importantly, and also evident in all vignettes, participants speak of the impact with stakeholders outside the coLABs. For Bem this is with her students and in invited speeches she delivers; for Meghna it is with colleagues in her think tank and the numerous other think tanks and multiple action researching projects in SE Asia. Chris further reflected on his experience in the coLAB as a rediscovery of practicing with the concept of polarities: "I moved from having a purely theoretical appreciation for the concept to working with polarities in practice with others. Subtractive awareness manifested in having become a bit stuck on the idea I heard myself share about transforming problematic grand narratives, such as neoliberal capitalism. I had focused on developing a replacement grand narrative that could gather equivalent power. In the coLAB I started to let go of this idea and embrace the notion that diverse alternative narratives might guide transformation without cohering into the same kind of narrative as neoliberal capitalism."

The experience of subtractive awareness can feel liberating, a practice of creating space that wasn't there before. In one coLAB session, Chris described the feeling that he was "carrying these heavy rocks that stopped him from climbing, and it was a great relief to realize that I could simply set them down and carry on." More practically, he reflected that letting go of "bullet proof run sheets" in his facilitation practice had freed him from the feeling that he had to "get things back on track," allowing him to respond to the present needs of the group more creatively. Ultimately, he reflects, "I had to let go of my fear that not following a run sheet would lead to disaster. The coLAB provided a safe space to experiment with new practices before taking them out into the world."

Generally, we may say that participants learn if they experience themselves moving toward emancipation, feeling liberated to be more themselves. Thus, the value of the coLABs is a combination of feeling revitalized, reawakening to one's own earlier intuitions or deeper values and 'paying it forward' in work with stakeholder clients or students. The impact or value is shown ('proofed' in Pragmatist terms) by actions taken outside the space with stakeholders for the common good (Bradbury-Huang et al., 2010).

Practicing Subtractive Awareness

We turn now to a handful of actionable elements of this subtractive approach that appear to support the specifically developmental nature of the work:

1. *Developmental Edge Assessment*

In terms of subtractive awareness, knowing what developmental stage you tend to operate from and where you could potentially be headed can give a powerful sense of what to let go of and what to embrace. For example, for Chris, the wording of the developmental assessment helped in recognizing a rigidity in his facilitation approach—letting this go was frightening but liberating.

Participants in coLABs are offered a specially designed online assessment keyed to Loevinger's work (*Shifting Horizons*, 2022).⁶ It's specifically intended to support participants in gaining clarity about their own developmental edge with regards to power, feedback, and collaboration. The self-assessment uses mostly images so that people's selections, as suggested by the projective hypothesis,⁷ and the gathered responses, then help the participants become more aware of their thinking and behaviors. In voluntary sharing of results of the assessment, participants have insights into experiments they might make (e.g., experiment with abandoning a facilitator flow sheet; decentering oneself as the expert in the room) with a reminder that each action-logic unlocks more choice and wider perspectives (one can also choose not to abandon previous habits).⁸

2. *Facilitator-Participants*

Noted above, facilitators see themselves also as participants. Thus, when facilitating they do so consciously at their developmental edge. Yet there is a right balance. Facilitators also serve participants-stakeholders who arrive to a coLAB for their own purposes. Thus, attention follows intent. Tensions can be transformed—cognitively—from something to avoid, into rich opportunities to grow and discover when the lens is swiveling between self and context. Susanna illustrates how she combines the dual roles:

It was 10 minutes before the workshop start time and I'm feeling really contracted. I asked my co-facilitator 'what about you?' In fact, I felt concerned that unresolved tension between us might occlude our ability to act and facilitate

⁶ <https://shiftinghorizons.io/>

⁷ The empirically grounded assumption that ambiguous stimuli of images used in the assessment bypass both conscious suppression and unconscious defenses that might otherwise result in faked, distorted, or falsified responses.

⁸ For those who seek other ways to engage in personal developmental work, freely available 'self quizzes' that exist on the internet might be repurposed for developmental praxis.

our explicit shared intention, which was to facilitate a safe, open and honest learning space for others. By shining the light on ourselves, through candid and brave discussion, we were able to make visible the archetypal poles we were unconsciously preferencing. We agreed to stay present and curious about our dynamic throughout the coLAB to see what learnings might arise, particularly since our main visceral activity was all about embodying-to-make-visible polarizing tensions in a change process. (Susanna, CoLab participant)

As a result of this practice with peers, and beyond the coLAB itself, Susanna has become more reliably a “conscious initiator of collective self-reflexivity with all the teams she works with when delivering design, leader development, or change services. Although uncomfortable, and risking being perceived as difficult or too process oriented, she “takes a stand for transformational inquiry when tension arises in the moment.”

3. *Feel Bothered*

Stepping to one’s own developmental edge is an invitation then to allow oneself to notice something that is ‘pulling at our sleeve,’ something that bothers us, in that it holds us back, perhaps related to our anxiety. And while self-insight may catalyze development, such awareness is sterile until embodied. Focus is thus potentially transformative yet can be wasted in self-critical rumination. Thus, again an opportunity to share with peers helps fruition of insight in experiment and/or experiments becoming crystallized as insight. In popular psychology, power of awareness has come to mean focus on the positive. However, for later stages of development, the very thing that bothers us can be offered *judicious* attention when trusting the company of peers (‘developmental friends’),⁹ to yield a new stage of development. We might say simply that information in our heads seeks naturally to move through the feeling body (heart) so as to be expressed/liberated in embodiment, i.e., as movement, or hands taking action. The participant’s consciousness best allows this internal momentum by not impeding it. When we become aware of something in the body, we have the power to change it. Therefore, clarifying the intention to expand ourselves and our

⁹ The roots of the practice of developmental friendship appeared in Bradbury and Torbert, (2016), a book that described a relational action inquiry into the dynamics of power and love. Now developed as central to Action Research for Transformations, this type of inquiry transforms through life as it transforms how we live our life. The six elements comprise: 1) engaging in some kind of shared work; 2) feeling high relational regard toward one another; 3) wishing to become more known to one another; 4) making a commitment to self-development through reflexivity; 5) experiencing a quest that increases—and requires—mutuality on the way to a more sustainable world; 6) recognizing the significant role of a “third” presence—namely a mutual friend and/or community of co-practitioners. See also <https://actionresearchplus.com/pausing-in-developmental-friendship-enjoy-the-practice/>

transformational capacity is a necessary precursor to being part of helping transformations happen.

4. Narrate the Absence as Change

Narrative theorists point out that stories tend to be about change. As each participant in a coLAB changes, they are acting out a new story. In perhaps the most well-known narrative structure, the hero's journey, the protagonist sets out by letting go of their comfortable existence in the 'ordinary world' and crossing the threshold into adventure. As they return from their adventure, changed, they typically come with a gift that replaces that which they left behind. In this sense, subtraction is rarely just subtraction—it is clearing space for the new to emerge and take root in the self. Storytelling is thus a powerful practice for reflectively narrating the changes experienced in a coLAB: What has been left behind? What has been gained? What has changed?

In addition to the hero's journey, our coLAB worked with Marshall Ganz's (2011) public narrative framework, which encourages communicators to tell a story that starts with 'I.' The idea is that the story of self establishes credibility. This is followed by 'a story of now' that contains a call to action (e.g., the IPCC has told us we are the generation that decides how climate change progresses, now what?). And a 'story of us' that articulates how we are together able to respond to that call for action (Ganz, 2011). With our commitment to mutual learning and relationality, we worked with this framework quite differently. The coLAB experience can be narrated as a series of attempts to bring forth a story of us by sharing our stories of self. In the terms of the three spaces (i.e., relational space, conceptual space, and experimental space) explained above, through which participants scaffold themselves, i.e., through relational, conceptual and experimental spaces, our personal stories can also be told as ones that bridge our own emancipatory 'relational' space with its spaciousness, with conceptual space's shifts in self-identity into experimental space with its reach toward co-creativity.

At the start of co-designing the coLAB, colleagues came with the intention of exploring how narrative informs action research for transformations. In retrospect the bothersome nature of this combination of narrative and action research became the very issue that was subtracted for her. She explains:

“Just to get started I had to grapple with an internal struggle. I respected these these co-facilitators but their emphasis on narrative bothered me. I explained that I saw narrative as somewhat 'airy and unpragmatic.' Worse, I explained I feared we'd waste time in pleasant storytelling about transformation yet experience nothing transforming with our stakeholders within the various spheres of influence outside the coLAB we each led. However, at my developmental edge I saw a need to move in a way that works for all of us. So it followed that I needed to release/give

up my concern and engage in a way that was fully supportive. I committed to the collaboration by saying: ‘I trust and support your emphasis on narrative. I will keep my focus on scaffolding the group in taking developmental steps. “Over the months, I saw my colleagues shaping and allowing others shape the coLAB in ways no one originally imagined. I saw individual agency becoming co-agency. Narratives came to be reframed. It was no longer the airy vocabulary I feared, but compelling storytelling linked to creative actions taking place outside the coLAB. I experimented with embracing the Ganz narrative framework my colleagues loved so much. I used it in leadership development work with politicians. Bem summarized this move from self to others saying, ‘haven’t we always been seeking the story of us.’”

Subtractive Awareness Births New Narrative

The following are steps in facilitating subtractive awareness.¹⁰ They presume starting knowledge of one’s own developmental stage and a reasonable level of brave space protainer with developmental peers. They may be helpful for others.

- What is your developmental edge?
- What is one developmental step you can take in being brave with others?
- What might you need to let go of to take this developmental step?
- What do you expect might change among your stakeholders as a consequence?
- [later] What has actually changed/is changing?
- What’s the new story of you/your stakeholders that you’d like to share?
- What gift are you now carrying into your practice?

Limitations and Parameters

The practice of subtractive awareness serves best those who self-select out of a desire to learn to meet the complexity of their stakeholders and environment. Importantly, our understanding of subtractive awareness emerged with learners already well anchored in their inner authority, i.e., capable of self-authoring. In developmental terms they are at least capable of redefining their own worlds and

¹⁰ With thanks also to Dr. Miren Larrea of Orkestra Institute at Deusto University whose related work in the Basque Country first articulated these questions.

work informed but not dominated by external standards. These are learners who, additionally, are willing to risk ego destabilization in the companionship of others to liberate more of their own capacity and its multiplier effect. These are the educator change leaders with capacity to ‘pay it forward.’ Paradoxically they are becoming more themselves. Thus, they can invite more of their students and clients (and people at later stages *always* have students or clients, they are not individual producers [Jaques, 1998]) toward the difficult work of living well within our complex and transformative times of eco-social crisis without being paralyzed—or sleepwalking—with anxiety.

As noted earlier, all development involves some letting go, so there are ways in which all learners can engage with subtractive awareness through critical reflection. But the full practice described here is perhaps not for the majority i.e., people whose ‘emancipation’—developmentally speaking—requires further addition of internal authority. Put simply, if participants don’t have a well-advanced independent stage of development, they can’t as easily engage successfully in the ego destabilization required of interdependence. Invitation to subtraction is likely to be either ignored/dismissed or possibly criticized as confusing or simply a waste of time.

Further, subtraction may be offered but *never* exercised on others. Key, therefore, is that scaffolding efforts are foremost role modeled with authenticity by the facilitators. The following participant’s self-report is from a coLAB led by Susanna with a different set of professionals. We see in it a contrast. The coLAB participant is younger, early 30s, and recently progressing career wise. They describe a developmental edge of ‘letting go of pleasing others’ (which might be read, developmentally, as consolidating more in self authorship after years of self-conforming). The participant explains: “I’ve worked hard to get to this point in my career, I need to give living from my own inner voice a chance. I can’t stifle it anymore. I feel an urgency that my intention for my life needs to be lived. I think it will make the difference in the long run.” We see this ‘letting go,’ however, less as a subtraction and instead as a deepening of ‘internal authority.’ By way of contrast we might name it ‘additive’ which precedes ‘subtractive’ awareness.

Linking to the theme of narrative, we might write that being an interdependent author—a teller of co-creative stories with others—requires that author to have a sense of their own ‘authority.’ Such authorial voice may be hard won, especially for populations that have been historically marginalized (the very population that action researchers often work with). For example, the participant quoted above goes on to note an obstacle attributed to their cultural background, explaining: “It’s foreign and unknown in the culture I come from where communal environments regulate each other. The practices I and we learned to invite self-regulation are opening my awareness of a new possibility of what the future holds, and how to bring my full self forward.” One of the conundrums of later stage scaffolding is the hold of the polarity of self-importance (with its destructive edge of narcissism) with that of group presence (with its descriptive

edge of group mind). Cultural habits are not caught up with this later stage of relational growth, thus coLABs and similar initiatives are experimenting with new ways of being, relationally.

We end with a note on the necessary ethical orientation of this work and a reminder of its purpose. Scaffolding efforts with subtractive awareness serve a sustainability outcome in that they can multiply adult development and stakeholder experimentation in the service of sustainable living. Therefore, the work we describe grants dignity, or paradoxical *autonomous regard*, to use the vocabulary of Indigenous scholar Mary Graham. That helps ensure individuals may rise toward unconstrained interdependence, a key to the Great Turning toward a life enhancing society.

The proliferating promise of coLABoratorship, namely the combination of leadership and collaboration within a social laboratory of action, is that creative solutions at the local level can become globally conjoined. We aspire to a more beautiful world for all beings.

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