Developing Groups that Change Our Minds and Transform Our Brains:

Systems-Centered’s Functional Subgrouping, Its Impact on Our Neurobiology and Its Role in Each Phase of Group Development

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Abstract

Systems-Centered Therapy and Training (SCT) is a theory-based systems approach that introduces the method of functional subgrouping that enables groups to more easily integrate differences in the service of group development and transformation. Functional subgrouping interrupts the endemic group dynamic pattern of scapegoating differences and enacting repetition compulsion roles fueled by group phases that fixates group development. It also simultaneously develops the capacity of the group for “social engagement” (Porges, 2011) where group members learn to enhance and utilize their social brain functioning and resources.

A large group met each day of a five-day Systems-Centered Training conference. For the bulk of the day, participants attended one of four experiential training groups at varying levels of experience, all focused on applying systems-centered training and therapy (SCT). At the end of each day, members from all four training groups formed a large group. This large group (60-70

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members) used SCT and its method of functional subgrouping to discover and explore the group dynamics and goals that emerged as a large group used functional subgrouping.

In functional subgrouping, members join on similarities enabling small differences within the similarities to emerge (Agazarian, 1997). Larger differences are explored in a different subgroup, with small differences then emerging within each similar subgroup. Over time, members discover similarities in what was initially different as the differences are integrated in the whole system. Functional subgrouping establishes a norm that no one in a group works alone as members learn to resonate with a greater and greater diversity of human experience.

This large group had been exploring the challenge of shifting away from “explaining” the world and instead discovering how to “sit at the edge of the unknown,” essential work in SCT. One member (pseudonym Tom) described letting go of his old “explaining” stories and discovering he felt increasingly anxious as he did so. Tom’s anxiety increased still more, and took the form of feeling he would fall apart (annihilation anxiety). He could hardly bear it. Very quickly another member spoke to join him, and following the steps of subgrouping, first attuned to and reflected the heart of what he had contributed, and then added her version which was a significantly lighter level of anxiety. This lighter level did not fully meet Tom but was clearly similar enough as he stayed in eye contact with her and appeared a bit calmer. The next person joining the subgroup added her experience of feeling excited at the edge of the unknown. Excitement was too different from Tom’s experience and his terror increased, only contained by resonant eye contact with the leader and a large silent subgroup who quietly worked along, attuning to him until his tears stopped, his breathing settled and he announced he was alright. Later in the review at the end of the meeting, Tom brought in having learned that he did not have to hold anxiety at the edge of the unknown for the whole group.
This kind of resonance (both between the member and the leader, as well as the subgroup of members that were silently resonating with Tom) comes from our social brain resources, which are heavily right lateralized. Our right-centric brain attends to “we” and experiences “the world of relationships … as it is emerging in this moment” (Badenoch, 2016, p. 2). Also, our mirror neuron circuitries in our brains fire similarly to the brains of others when we see others’ actions (Iacoboni, 2009). It may even be that emotional resonance comes partly from our mirror neurons “imitating” others either strictly or broadly. Empathy involves our upper limbic as well as our right middle prefrontal cortex.

Our right-centric social brain is also always checking for neuroception of safety or threat (Porges, 2011). When we see someone is present to us, e.g., relaxed facial muscles, engaged eye contact, melodic tone, our autonomic nervous system responds with ventral vagal activation and the striated muscles of our face relax, our heart beat slows, our breathing deepens, and we open more to ourselves and to others. When experiencing what Porges termed “social engagement,” we make resonant connections with others and co-regulate. Conversely, our autonomic right-centric brain/nervous system is also alert to sense or “neurocept” danger, activating flight/fight (sympathetic activation) or even freeze (dorsal vagal). SCT sees these “threat-oriented” activations as linking to early survivor roles that at one time represented our best past adaptation when stressed with our early caregivers or social context.

The group context, replete with interactions, has both potentials, to activate social engagement and the neuroception of safety (Porges, 2011) or our threat-scanning neural systems, alerting for danger. In our large group example, when Tom was met by excitement when he felt terror, a “too different” difference, his neural system responded to this “danger” and Tom’s distress increased. In contrast, functional subgrouping encourages us to activate the resources of
our social engagement circuits by making eye contact, joining and building on similarities where we build attuned and resonant contexts for exploring. Over time, subgrouping develops here-and-now adaptive roles which also allows rewiring of our habitual response patterns related to our social and attachment roles that once developed for adaptation and safety. Or in our socially engaged functional subgrouping, we can also “safely” explore our neuroception of danger and reality-test it.

**Group Therapy and Neuroscience**

In spite of the research strongly supporting the equivalence of effectiveness of psychotherapy groups to that of individual therapy (Burlingame, Strauss & Joyce, 2013), group therapy is an underused modality. This is also notwithstanding the current interest in the inherently social nature of our human brains (Cozolino, 2014) which bespeaks to the importance of group treatment with its plethora of interpersonal stimulation.

Cozolino (2014) provides a useful analogy for grasping the social nature of our human brains. Just as the mouse brain develops new neural connections as the location of its food source changes, the human brain is constantly adapting and changing according to “an ever-changing stream of interpersonal information and constellations of relationships” (Kindle Locations 427-430). Similarly, social baseline theory (Beckes & Coan, 2011; Coan & Sbarra, 2015) describes how both animal and human brains expect social resources and function better under stress and with less effort when familiar others are present. Or as laboratory research demonstrates, rats who have a “buddy rat” under stress exhibit lower stress responses. Many of those who seek psychotherapy would benefit significantly from the range of interpersonal interactions that a group makes possible and which stimulates the kind of social brain development that happens in
a group (Gantt & Badenoch, 2017).

Group processes can also activate neuroception of danger where we resort to flight, fight or freeze and what SCT terms past adaptive survival roles. We all developed survival roles in our early life in compromises with our caregivers. These roles both protect our essential self and maintain these relationships which were vital to our early survival and development. SCT group leaders work actively to establish functional subgrouping as a norm which not only develops present adaptive roles and lowers the likelihood of feeling threatened and responding from past adaptive roles but also activates social engagement replete with attunement, resonance and empathy between members (Gantt & Badenoch, 2017). SCT groups deliberately develop group norms toward using and emerging our social brain resources in the service of development and transformation rather than just survival.

Siegel (1999) has introduced the idea of mind as a process of regulating the flow of energy and information. SCT has extended this to conceptualizing the group mind as the group process of regulating the flow of energy and information (Gantt & Agazarian, 2010). Systems-centered group psychotherapy develops the group mind, leading to the group functioning like an amplified social brain whose functioning expands and simultaneously develops the social brain capacity of its members (Gantt & Agazarian, 2010; Gantt & Badenoch, 2017).

Further, Schore (2010, 2012) and Greenberg (2007) have emphasized the importance of implicit experiential learning for psychotherapy. SCT groups emphasize this too, focusing on exploring in the here-and-now and introducing functional subgrouping not only to provide the interactive, mutual experience but simultaneously to contain and explore the group dynamics. This regulates previously unregulated experience which Schore sees as the core of attachment adaptations. SCT has also hypothesized that functional subgrouping actually enables the
r eworking of attachment roles (Gantt & Agazarian, 2010; McCluskey, 2002).

Moreover, it is important to note the usefulness of the group for containing transferences that are engendered by, and express, the group dynamics in each phase of development. SCT conceptualizes transferences and the repetition compulsion as role systems that replicate the solutions from the past. By activating our social engagement system through functional subgrouping, the group both provides and facilitates social brain function that furthers the working through of the past adaptive survival role systems or transferences that are stimulated in each phase. Functional subgrouping supports attuned, resonant and empathic relating leading to neuroception of safety that enhances new learning and disconfirmation of early implicit memories. This provides a strong alternative to a continuing enactment of what SCT calls early survival roles, the equivalent of transferences fueled by the group phase and its dynamics.

**Systems-Centered Therapy (SCT)**

SCT is a theoretically derived systems approach developed by Yvonne Agazarian (1997, 2012). Agazarian initially trained both in psychoanalysis and in group dynamics. In psychoanalysis, she discovered a comprehensive theory of the individual yet sparse understanding of group dynamics and group processes. In group dynamics, she found the group dynamic understandings but with little link to the impact or dynamics of the person. Both were so important to her that when she had a fire in her flat, she left behind her diamond ring and instead took two books with her: Cartwright and Zander’s *Group Dynamics* and Freud’s *Totem and Taboo*. She has devoted her life’s work to developing an integrative systems theory that enables looking at both individual and group dynamics from a single theory. Her theory of living human systems does just that and can be applied to systems as small as a single person, a couple, a family, a team, a whole
company, a nation, or all of the world (Agazarian & Gantt, 2000).

The theory came first, the practice and application of it second. “A theory of living human systems defines a hierarchy of isomorphic systems that are energy-organizing, goal-directed and self-correcting” (Agazarian, 1997, p. 18). Each theoretical construct was operationally defined, and the definitions then translated into methods and techniques for practice. The two central constructs of hierarchy and isomorphy are summarized below as a bridge to further elaboration of the practice in SCT groups.

**Hierarchy.** *Hierarchy* defines that a system exists inside of a larger system context and is itself the larger context for a smaller system existing within it. Picture three concentric circles. Applying this theoretical map to the large group described earlier, the larger group is the supra circle. The members who cluster into different subgroups to contain, explore and integrate the group’s differences are represented by the middle circle (in this example, there was both a subgroup who felt excitement and a subgroup who resonated with annihilation anxiety). The smallest circle of our three represents the person system which provides the energy for all systems in the hierarchy.

Seeing system dynamics enables us to experience ourselves without personalizing ourselves or others. Pictures often help us see and think about living human systems and not just people. Picturing three concentric circles also orients to the importance of the mid-level system as a fulcrum system with contiguous boundaries with the group-as-a-whole, and the smallest system, here the person system. Changes in this fulcrum system level then have the strongest potential to impact both the norms of the group-as-a-whole and the person system. In our large group example, the fulcrum subgroup system contained the leader and the anxious member who were in nonverbal resonance and eye contact along with the subgroup of silent members who
resonated nonverbally. This subgroup lessened pressure on the person system of Tom who no longer had to hold his annihilation anxiety alone. As in this large group example, nonverbal subgrouping is especially essential when one’s experience is a-verbal (arising from the instinctive and upper limbic levels of the brain). Since our brains work best in collaboration with other brains, resonance and social engagement lead to an ever-increasing mutual neuroception of safety. This kind of nonverbal attunement and containment can foster what Toomey and Ecker (2009) call a reparative disconfirming experience.

Thinking system hierarchy also orients us to see a person system as always nested in a larger context, never in isolation. The large group contained, and by the end integrated, both annihilation anxiety and excitement at the edge of the unknown. The outcome would have been very different for Tom and the group if Tom had been left to hold annihilation alone.

Identifying system norms in the hierarchy helps us determine what is and is not possible within a system context. For example, consulting with a team in an organization to change its norms to meet its goals without teaching the team to identify the norms of its larger organization will result in the team trying to export their new norms into the larger system. The larger system will quickly put the old norms back and likely the team itself will revert to its old norms at the expense of its goal (Agazarian & Philibossian, 1998; Agazarian & Gantt, 2005; Gantt, 2013).

Isomorphy. Drawing from von Bertalanffy (1968), isomorphy is defined as similarity in structure and function for systems in a defined hierarchy. Again, picture our three circles. And this time, let’s look at the hierarchy of a team inside an organization (the person system inside the whole team system which exists in the system of the whole organization). Learning about the structure and function of any system level, e.g., the team level, would enable us to learn about the structure and function of the other system levels, both the organization and the person.
Structure is defined as boundaries that open and close. Boundaries at each system level open to information/energy and close to entropic noise (Shannon & Weaver, 1964). Thinking isomorphy means we would expect a similarity in boundary permeability to information/energy at each system level. A closed boundary in the person system is like closing our mind to the new and different. As human beings we close our minds whenever differences are different enough to activate our threat alert system. Paradoxically, differences do in fact “threaten” our current stability though integrating differences fosters our development. Just as we close our minds to difference, subgroups close boundaries to differences that are too different, and the group-as-a-whole sets norms that keep out certain differences. Or conversely, when the boundary is too permeable at one system level, information cannot be contained or organized or comes in faster than it can be integrated, e.g., when we feel flooded by information. In this case, isomorphy leads us to hypothesize there is too much permeability at the other system levels in the defined hierarchy.

In SCT, living human systems function to discriminate and integrate differences toward the goal of survival, development and transformation from simpler to more complex. Energy/information is the fuel of living human systems and always contains similarities and differences. Similarities support the goal of survival and differences the goal of development which, when integrated, leads to transformation. Functional subgrouping, SCT’s conflict resolution method, puts this into practice and facilitates the work of discriminating and integrating differences, differences in the apparently similar and similarities in the apparently different (Agazarian, 1997), e.g., the large group integrated both annihilation anxiety and excitement at the edge of the unknown. Subgrouping potentiates the inherent goals of every living human system to survive, develop and transform from simpler to more complex. Not
surprisingly, this theoretical hypothesis echoes Siegel’s work in interpersonal neurobiology where he proposed that integration of differentiated states/parts of the brain leads to increasing integration and well-being (Siegel, 2012).

Putting theory into practice using functional subgrouping, group members first reflect the heart of the other person’s message in attunement and empathy, join in resonant similarities, and then add small differences that build on the similarity. Groups then contain differences in different subgroups where each difference can be explored and integrated rather than the too familiar group process of scapegoating or extruding differences as a consequence of our neuroception of danger or threat (Agazarian, 1997).

Putting Functional Subgrouping into Practice

In a recent SCT training group, there were members who already knew how to subgroup as well as two new members who did not. The goal for the whole group was to integrate the differences contained in these two subgroups. The goal for the subgroup of new members was to learn the group norms well enough, especially the norms of functional subgrouping, so that they could contribute in a form that was similar enough to the group norm to weaken a group’s tendency to close its boundary to differences.

The “seasoned” subgroup goal was to explore any impulses they noticed to close the boundary to new members to preserve the familiar. Making explicit the inevitable implicit goal of closing the boundary to new members enabled this to be explored rather than enacted. New members represent a difference to a group and often our human response to difference is to close our boundaries to stay with similarities and maintain what we know already, commonly in subtle and unrecognized ways. Theoretically, closing boundaries orients to survival, an important
system goal, yet at the expense of development. This tension is always alive when new members join an ongoing group and is explicitly explored in SCT groups.

After briefly observing the subgrouping process, a new member (Terry) spoke, reflecting the previous speaker and then building with his own version. In building, Terry discovered his frustration with the structure that the leader was introducing. SCT leaders are very active toward the goal of influencing functional group norms until the norms are established. This itself is a big difference for most members. Frustration is a common response to anything new and different. With encouragement from the leader to explore his experience rather than explain it (exploring is a primary orientation in SCT), Terry was able to track the experience in his body and open up to his full feeling. This kind of exploration is similar to what Siegel (2007) describes as: “noticing the differences between sense and story, between primary experience-dependent ‘bottom-up’ input and the secondary ‘top-down’ chatter of prior learning (p. 260).”

As he explored, Terry found himself moving his head back and forth, a sense of clenching something with his teeth, like a wolf shaking a prey or a dog, a toy. Once Terry was ready to be joined, Dick (from the “seasoned” subgroup) carefully reflected Terry’s words yet missed his energy and feeling tone. At the subgroup level, the “seasoned” subgroup was closing its boundary to the new members and to unfamiliar feelings. With encouragement from the leader, Dick also reflected the movement and gestures, and with obvious feeling imitated Terry’s shaking head. Terry went from looking down when only his words were echoed (when Dick’s boundary to Terry’s feeling was relatively closed) and later reporting he had felt shame, to visibly relaxing and showing relief when his energy and feeling were reflected (evidence of an open boundary and the transfer of energy/information, in this case at the nonverbal level related to more right brain activation). Terry’s work to “explore” rather than “explain” was an important
subgroup. “Exploring” enables the group to move away from redundant communications to discover what is not yet known, an essential “fork-in-the-road” in SCT groups.

Initially, when Terry’s words were echoed without communicating resonance to his feelings, he showed signs of dorsal vagal response, a threat-response directed primarily to survival. Terry was in what SCT calls a person-system survivor role, and he was cut off from his subgroup with its essential social brain resources that help manage stress and solve problems more easily. Functional subgrouping develops our inter-person system that is essential for developing and transforming the person-system. When not met emotionally, dorsal vagal responses are stimulated in contrast to the ventral vagal responses that functional subgrouping activates. All insecure attachment roles contain sympathetic activation (flight, fight) or dorsal vagal activation (freeze). In contrast, when we are met by another, there is mutual ventral vagal activation and greater openness to ourselves and the other and the other to us, enabling more integration of small differences in the secure relational context of functional subgrouping. Over time in functional subgrouping, secure attachment patterns develop that provide alternatives to earlier attachment roles.

**Person-as-a-System**

More recently, SCT (Agazarian, 2015) has elaborated its theoretical map where the hierarchy is the person-as-self or Inner Person system, person-as-member or Inter-Person system, and Whole system (Figure 1). The inner person system goal is survival and contains life force energy and the exploratory drive, both fuel the whole hierarchy. The inter-person system goal is development. The whole system goal is transformation and norm-setting. The fulcrum system is the inter-person system, the most influential for change in the person system hierarchy and in all
living human systems. Each system organizes energy to meet its goals. In the inner person system, survivor roles organize life force energy and curious observer roles organize the exploratory drive. The ongoing integrations of these roles form the emerging inner person system which fuels the inter-person system. When the inner person system is more biased to past adaptive survival roles, the roles that cross the boundary into inter-person skew to the past with little curiosity about the here-and-now goals.

Returning to our example, when Terry was not met emotionally in his primary aggression, he experienced a shame-based role, very likely related to a past adaptive survivor role where he shamed his aggressive feelings that were ignored, put down, attacked or shamed by others. (Terry’s early role adaptation was essential to protect his life force and maintain his relationship with his caregivers.) When Dick first echoed Terry’s words yet missed his energy and feeling, Dick was also in his survivor role which then stimulated Terry’s survivor shame-based role. In Dick’s past adaptive survivor role, he had learned to avoid aggressive feelings in himself or others. When Dick shifted instead into his inter-person system relating to Terry’s
feelings as a subgroup member, he reflected the heart and feeling of Terry’s message. From their present roles as subgroup members, both had a very different experience. These differences enabled the subgroup and the group-as-a-whole to discriminate and integrate a greater depth of emotional experience rather than defending against primary aggression. This illustrates how subgrouping enables a disconfirming experience and starts to change early implicit memory, the substrate of our early attachment roles. Over time, this group developed a norm for exploring the primary aggression inherent in human experience. Exploring aggression rather than explaining or enacting it leads to new adaptive roles where we can use the energy and knowing in our feelings in the here-and-now, as members to contribute and influence the group that influences us. Learning to take membership in group paves the way for taking active membership/citizenship to influence the systems one is part of throughout one’s life.

**SCT’s Phases of System Development**

SCT’s conceptualization of phases built on Bion’s (1959) basic assumptions of group life (flight/fight, dependency, pairing) and Bennis and Shepard (1956) who adapted Bion’s assumptions into a phase development model. SCT identifies three phases of system development: the authority phase (with its subphases of flight, transition to fight, roles/role-locks, and the crisis of hatred); the intimacy phase; and the work phase (Agazarian, 1997). Uniquely, SCT conceptualizes each phase (and subphase) of development as a living human system (Agazarian, 1994; Agazarian & Gantt, 2003) with phase-specific developmental goals, driving and restraining forces, boundary permeability, and subgroups. Drawing from Lewin (1951), driving forces move a system toward its developmental goal and restraining forces toward competing goals, often survival at the expense of development. SCT weakens phase-
relevant restraining forces in order to release the driving forces and modify the boundary permeability that is most easily modified in each phase. Each phase also has predictable subgroups that contain the conflicts of the phase. Weakening the restraining forces at the phase-relevant boundaries (Agazarian, 1997) frees energy for exploring explicit and implicit subgroups (discriminating and integrating energy/information) which develops the group. Attuning to the group phase lowers frustration that ensues when leaders ask groups to do work they do not yet have the resources to do successfully. Developing in each phase also develops the group system resources that make mastery easier in its next phase. Figure 2 provides an overview of the restraining forces that are weakened in each phase. The next sections discuss subgrouping and neurobiological development in each phase.

**Functional subgrouping in the authority phase.** In the authority phase, the developmental goal is to take our own authority with ourselves and others by weakening our human tendency to externalize our difficulties. Each subphase’s specific goal contributes to the overall phase goal. Subgrouping in each subphase not only fosters phase development but also concurrently influences the neurobiological functioning, differently according to the specific subphase challenges, as summarized in Figures 3, 4, and 5.
**Flight subphase.** SCT works in this subphase to develop functional group norms, a secure group system and a reality-testing culture. The major restraining forces weakened are social roles or social transferences and the tendency to import stories or beliefs from the outside past into the here-and-now that function as a flight from the present. SCT groups in the flight subphase learn to subgroup functionally in the here-and-now instead of stereotypically and to recognize the fork-in-the-road between “explaining” which takes us to the familiar and into old stories and “exploring” which takes us to the unknown and potential discoveries.

Typically, both anxious and excited subgroups emerge and work in turn. As the anxious members learn to subgroup functionally, by first reflecting the other and then building with something similar, the subgrouping establishes a secure relational subsystem and primes its social brain functioning. Anxiety starts to diminish as members recognize they are not alone. The subgrouping develops a neuroception of safety as by being reflected, we feel understood and our ventral vagal activates and lowers the sympathetic flight activation in the flight subphase.

A psychoanalytic colleague remarked to me that subgrouping may in fact develop the “maternal function” in the group, essential in any developmental process, and equivalent to
Panksepp’s CARE system (Panksepp & Biven, 2012). CARE is one of seven instinctive “primary process subcortical” emotional systems (each either rewarding or punishing) that connect evolutionary ancient, deep central midbrain regions that interface with our upper limbic brain which is often referred to as our emotional brain.

SCT leaders also introduce the anxious subgroup to SCT’s protocol for undoing anxiety (Agazarian, 1997), further lowering anxiety and also establishing a discrimination between feelings generated by thoughts and feelings that emerge from our moment to moment ongoing experience. Members activate curiosity in this process which at the neurobiological level activates the subcortical SEEKING system (Panksepp & Biven, 2012), an approach system, in contrast to the FEAR system activation, a punishing system, that underlies anxiety. Once the anxiety lowers, the excited subgroup explores together, also developing neuroception of safety thus enabling discovery of differences within their similarities, and over time similarities with the originally “different” anxious subgroup. This leads to integration in the whole group. By developing empathic attunement which builds a secure group system, subgrouping lowers threat arousal.

SCT groups also learn centering: members sit in contact with the ground, follow their breathing while opening to the energy flow in themselves, and connect to knowing without words. This supports greater connection to the instinctive and autonomic activations which then enables more subgroup exploration of the nonverbal and a-verbal experiences or what Panksepp (Panksepp & Biven, 2012) calls primary process emotions. SCT calls this level of experience apprehensive in contrast to comprehensive which is weighted towards words and explanations.

Frequently, in the flight subphase, the group emerges roles of “identified patient” and “helper,” social roles which contain the dependency challenges early in the group’s work. Each
role is explored using subgrouping, one subgroup exploring wanting someone to make it better (identified patient role) and the other wanting to help or fix (helper role). This subgrouping enables the whole group to integrate dependency conflicts characteristic of the flight subphase.

**Transition to fight subphase.** By weakening its flight restraining forces, differences become more apparent, and the group transitions into the fight subphase. The goal is to lower our defensive reactivity to difference and learn to open to our aggressive energy (person system) rather than enacting it. The challenge is that our instinctive human neurobiology reacts to differences as threats. We easily go into sympathetic arousal reacting to differences and close our boundaries, attack, or scapegoat the differences. Importantly, having learned to use functional subgrouping in the flight subphase, the group can now use its subgrouping skills when conflictual differences emerge.

This phase shift is often signaled by frustration which is then explored in a subgroup with others who also feel frustrated. As in our example with Terry and Dick, subgrouping is oriented to exploring one’s experience of frustration rather than explaining why one is frustrated. Frequently, a second subgroup will contain tension and the SCT leader will introduce the subgroup to the SCT protocol for undoing muscular tension (a bodily defense against feeling) and discriminating tension from frustration which makes the boundary permeable to frustration.

As the group uses functional subgrouping to “explore versus enact” their frustration and irritation in reaction to differences, neuroception of safety and containment develops. SCT also encourages turning on one’s researcher or curious observer role as the process of exploration itself activates curiosity (SEEKING system) which lowers the pull to enact old role solutions to frustration, irritation, anger, retaliatory impulse, and rage. Drawing from Panksepp and Biven (2012), the SEEKING system lowers the activation of both the FEAR and RAGE systems,
common subcortical nervous system activations in all animals. In this secure subgrouping context, members first learn to undo old social roles where they turn their retaliatory impulse back on themselves in depression or discharge others in outrage and hostile diatribes. The subgroup then explores the experience of their retaliatory impulse and connects to the energy and information in their feelings and impulses.

Returning again to Terry and Dick lets us see how the subgrouping might be focused differently according to the group’s phase. When Terry went into a shame-based role, the group was in the early phase (flight) of integrating a new member where the work focused on establishing functional subgrouping. If the group had been transitioning to fight, the work for Terry and his subgroup would be exploring how each turned their retaliatory impulse about not being met back on themselves. SCT calls this the boomerang defense of depression against the retaliatory impulse. Undoing this enables the subgroup to explore how they feel toward the leader for not requiring Dick to meet Terry fully. In exploring their retaliatory impulses, this subgroup fills with its energy, sense of power, strength, and connection to its life force. Importantly, SCT leaders require the group in early phases of development to target all angry feelings toward the leader until the group-as-a-whole has learned not to personalize anger.

**Roles and role-locks subphase.** The goal here is to learn to work with others who are different from us without defending from old roles. The subgrouping focuses on exploring the familiar social roles like one-up/one-down, dominant/submissive, compliant/defiant that we use to manage conflicts over differences. This work is facilitated by the neuroception of safety established with functional subgrouping, and fueled by SEEKING system activation at the instinctive level, isomorphic with curiosity (middle prefrontal cortex). Exploring “roles” then shifts to feedback, using subgrouping support, as members give each other neutral, empathic
feedback about the inductions and impact of the roles. The subgrouping emphasizes our researcher roles (middle prefrontal cortex) and the inter-personal impact of role inductions from others on us and from us on others.

In our brain, this work develops more vertical integration, expanding our capacity to observe our social roles, observe our roles objectively, and understand the impact these roles have on others in the group, and the impact of others’ roles on us. The security and support of the subgrouping process enables more integration between the prefrontal cortex, upper limbic system and our instinctive brain.

Returning to Terry and Dick, if the group had been in the roles subphase, both would have been reminded to center, turn on their researcher, and name the role that was blocking their subgrouping. This role exploration further strengthens the observer role, providing containment for exploring both inner and inter-person. Members observe their experience of their role rather than enacting it, access empathy for its impact on oneself and others, identify the role behaviors, and access curiosity about their role inductions (all using middle prefrontal cortex). Likely others would join the subgroup of exploring a past adaptive role that was stimulated for them in the present. Subgrouping creates here-and-now roles as subgroup members, providing an alternative experience and disconfirmation of the role experience. The neurobiological development here is more complex as it is also strengthening the capacity to observe and feel for oneself and for others, activating more right-centric limbic function.

**Crisis of hatred.** Exploring the hatred of the leader as the stand-in for all authority is the work in this subphase so that hatred no longer need be enshrined in defensive restraining roles, similar in some ways to the analytic idea of defensive splitting. Only when the group has weakened the restraining forces to reality-testing (flight), to emotional experience (transition to
fight), and undone and learned not to personalize their inter-personal roles (roles/role-locks subphase), does the group have the resources to explore the hatred of the leader (paranoid transference) both in the here-and-now and as the stand-in for all external authorities who have disappointed us. This is the fulcrum work with the negative transference.

In our earlier example, Terry gave voice to the first glimpse of the energy that is explored once the group develops to this subphase (in describing his frustration with the leader’s structuring of the group). Envisioning this same group as it moves into this subphase, the subgroup exploration might build from Terry’s bodily expression of shaking his head like an animal, leading to exploring the impulse to get the leader by the throat, and to shake her. As others joined, the subgrouping would deepen, with pleasure of getting the leader by the throat, the wish to destroy her, or to images of tasting her blood and ultimately of devouring her and gaining the sense of taking her power and having it for oneself. In this kind of whole group subgrouping, the subgrouping process flows and there is usually no need for reflection, each voice is understood as a voice for the group and the experience is not personal, rather it is universal. The group reports enormous energy, power and freedom, no longer constrained by their old roles in relation to the leader and ultimately grateful for the leader containing the hatred while the group explored (Agazarian, 1994). Sometimes a different subgroup also emerges, holding the horror of what we are capable of as human animals and over time integrating with the fullness of power and understanding in the hatred and the existential sense of awe and horror of the human condition.

This exploration is often dysregulating and in an SCT group, is always done with subgrouping that emphasizes attunement, resonance and empathy, providing what Schore (2012) calls an “interactive psychobiological regulating experience” that over time increases the group’s
range of emotional capacity and that of its members. This essential work builds a new range of emotional capacity implicitly and explicitly. In terms of neurobiology, the group not only expands the range of its emotional capacity but also obtains greater access to its subcortical primary process arousal and emotions, instinctive and upper limbic.

As the group’s exploration slows, the focus shifts from preoccupation with how the leader has failed or wronged them to a greater sense of its own authority and more interest in each other than in the leader. This marks the shift into the phase of intimacy.

Functional subgrouping in the intimacy phase. The goal here is working through the separation/individuation roles at the level of implicit experience. The subgrouping is similar yet also introduces an important difference. As discussed, the steps of functional subgrouping require first reflecting, then joining, then separating and reconnecting to oneself, and lastly putting one’s build into the group. These steps replicate the early developmental processes of separating and individuating. The subgrouping here includes exploring one’s experience in each of these steps with others who have a similar experience. For example, those who find it hard to separate after joining can explore this with others who also find it hard to separate. Each is reflected and understood in attunement and resonance, providing a secure context for exploring challenges in separating and also having a new experience of separating as they discover small differences. This subgrouping provides disconfirming experiences that enable rewiring early implicit memories that fuel our attachment roles and underlie our present relational patterns.

Two prototypic subgroups emerge in this phase as shown in Figure 4. One subgroup, whose attachment roles relate to staying close, finds it hard to separate. This “enchanted” subgroup sees the group as all wonderful (“we should meet every day, this is how life ought to be”) (Gantt & Badenoch, 2017). In the other subgroup, the past roles orient to staying separate,
“disenchanted” or alienated (“we are never really understood, it just doesn’t happen, it’s better that way”). The enchanted subgroup ignores differences as a defense against separation and focuses more on similarities. The disenchanted orient to differences and avoid similarities as a defense against individuation. As the disenchanted members subgroup with others who feel similarly, they discover togetherness while exploring alienation and disenchantment. In turn, the enchanted subgroup members discover small differences with each other. In time, the whole group integrates and transforms.

This work makes it possible for members to work together to further weaken the role-locks or attachment transferences between them. In one group, two members had been in a long-standing role-lock, both seeing the other as the problem. They had done considerable work in the early group phases to weaken their social role-locks and gained some freedom yet remained vulnerable to the re-emergence of their role-lock as it was rooted in early implicit attachment roles. One of the members made a decision to leave the group; in her view the role-lock was too

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4 These subgroups are similar to what Hopper (2003) calls massification and aggregation as defensives against incohesion, which he identifies as the fourth basic assumption.
much like her past and similarly her role-lock with the leader made her feel unsafe. The members, Penelope and Pat, worked together subgrouping to support really understanding each other. Each communication took some time of reflecting, correcting, reflecting again and again until the talker felt understood and then shifting to bringing in their own experience. Both stayed engaged until they were understood. The subgrouping process was very moving and reparative as both began to feel understood and to understand the other. In neurobiology terms, the subgrouping work in this phase expands neural differentiation and integration, the process that Siegel (2012) emphasizes as the path to development and well-being. Further, the subgrouping provides implicit emotional regulation (Schore, 2010) and implicit emotional learning, and increases connectivity in right brain circuits, reworking early implicit attachment roles.

**Functional subgrouping in the work phase.** Subgrouping here makes it possible to explore our inevitable human tendency to personalize, where we get caught up in our own experience or past adaptations without connection to using our knowing as a member in our context (see Figure 5). The second pervasive subgroup is the pull to de-humanize and follow the letter of the law without the spirit or connection to our human experience. The subgrouping work provides ongoing inter-personal and inner person integration of right and left brain function (Gantt & Badenoch, 2017), learning to see the isomorphy and integrate and contribute one’s personal knowing as a citizen of one’s context.
Being able to see context in this phase enables exploring the origin of old survivor roles and the important adaptations our survivor roles enabled with our caregivers. Subgrouping is supportive, containing and again builds a new relational substrate of implicit and explicit memory in the disconfirming experience in the here-and-now. Containment in the subgrouping supports greater development of the observer role so that the members can explore how in their early life their survivor roles benefited them, their caregivers and families, in short to see the essential value of the early role adaptations. This work fosters a more objective and compassionate relationship to one’s early roles. Exploring how one’s caregivers learned their roles in their family of origin further strengthens the capacity to see oneself and others in context and not personalizing their parents’ roles.

Conclusion

SCT’s systems theory and practical map enable group leaders to strengthen the neurobiological development essential for human transformation in psychotherapy groups and even work teams. Perhaps integrative of both Kleinian and relational influences in the psychoanalytic literature (similar to the challenge Agazarian set for herself in 1978), it enables a
group model for containing and exploring transferences which SCT operationally defines as system roles that link both to early survivor roles and also to the conflicts aroused in each phase of development. SCT develops groups that enhance social brain function through functional subgrouping that fosters social and implicit brain resources and facilitates the working through of the transferences in each phase by creating the neuroception of safety that leads to new learning and disconfirming experiences that alter old implicit neural patterns.

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