ON CONTEXT REPLICATION: THE ISOMORPHIC RELATIONSHIP OF TRAINING AND THERAPY

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Introduction

Teachers of family therapy face constant decisions about intervening into non-productive therapist-family sequences, for that is their work. Detailed guidelines at both broad conceptual and specific intervention levels, however, have been sparse. Clinicians once found themselves in similar straits. While often having to operate with theoretical and technical fragments, therapists have more recently benefited from the conceptual and pragmatic advances of several family therapy models. Many supervisors, frustrated by an intuitive, seat-of-thepants approach, have wanted more of this schematic guidance recently developed in the clinical arena. This paper attempts to narrow the theoretical and skillfocused gap between the therapeutic and training domains by outlining a blueprint, more elaborately developed elsewhere (Liddle & Saba, in press (a), (b); Liddle & Schwartz, in press) which can guide a family therapy trainer's work. This schema-in-development amplifies the previously recognized but underdeveloped concept of the isomorphic nature of family therapy and family therapy training. At the assumptive level, adopting such a view requires that these two domains be recognized as interconnected and interrelated. Further, this paradigm suggests that training and therapy interact recursively, co-evolve over time, and at a broader level, are themselves subsystems within other contexts which also are isomorphically interconnected.

Several authors have extensively discussed the parallels of training and therapy from a psychodynamic perspective (Ekstein & Wallerstein, 1958, 1972; Hora, 1957; Searles, 1965). Of particular note in this regard is the research of Doehrman (1976). In an empirically impressive study, she found that the "parallel process phenomenon occurs and recurs in a remarkable multiplicity of forms" (1976), p. 82).

In the family therapy field Haley (1976) has been a pioneer in the discussion of this matter.

> As clinical training programs change it is being discovered that a theory of therapy and a theory. of training are often synonymous. If a teacher believes that insight causes therapeutic change, he trains a student therapist by giving the student insight into himself and his personal problems. (Haley, 1976, p. 170).

Further along these lines, Haley has discussed another elemental aspect of the training experience.

The professional setting of the therapist, particularly his supervisory -relatianship is of basic importance. There is a reciproacl relationship between the supervisory structure and the family structure. If the

authority relationship between supervisor and therapist is clear, the hierarchy in the family will be more easily restructured. When the family hierarchy is in particular confusion ...it is especially important that the hierachical arrangement of supervisor and therapist be clear and firm. (Haley, 1980, p. 62)[1].

Definitions

Perhaps the most lucid definition of the isomorphism principle is Levison's:

> Categories which appear widely unrelated in content will reflect the same patterning of form, will be, in a word transformations or isomorphs of each other. It is important to realize that this is not idle analogizing. It is a literal belief that structure, or form, is constant in spite of changing content. (Levinson, 1972, p. 36).

Hofstadter's (1979) Godel, Escher, Bach: An Eternal Golden Braid relies heavily on the principle of isomorphism in a creative unraveling of the complex patterns of connection ("braids") that link the seemingly unrelated worlds of mathematics, art, and music.

> The word 'isomorphic' applies when two complex structures can be mapped on to each other, in such a way that to each part of one structure there is a corresponding part in the other structure, where 'corresponding' means that the two parts play similar roles in their respective structures. This usage of the word 'isomorphic' is derived from a more precise notion in mathematics. (Hofstadter, 1979, p. 49)[2]

The application of this perceptual framework to the clinical and teaching realms yields a way of understanding and ultimately applying the connectedness of the two. We have sought to explore the ways in which training and therapy are transformations of each other, and in a Batesonian sense ask: what are the "patterns which connect" the training and therapy domains? The teaching and clinical subsystems are viewed, to borrow Keeney's (1979, p.126) term, as "intertwining relational fields," constantly influencing and being influenced by the other (as well as broader systems within which therapy and training exist). Tracking the reciprocal and recursive relationship of these subsystems by means of the isomorphism principle provides the richness of vision alluded to in Bateson's dual or double description phenomenon. Articulating these points of connection, in this sense, provides a deeper understanding (Bateson's "depth perception") of each domain. Further, in an immediately more applicable sense, using the principle of the isomorphic relationship of training and therapy allows construction of a meta-framework for trainers in search of conceptual and pragmatic direction.

Although the isomorphs of training and therapy in this paper are discussed from a Structural-Strategic theoretical orientation, the principle being exemplified transcends any one school of thought. Broadly speaking, we have been interested in the ways one's theory of therapy is represented (through our premises and procedures) in one's theory of training, and vice versa. We postulate that the isomorphism principle has relevance within any theoretic frame of reference. The reader is encouraged to trace the isomorphisms of his/her own model of training and therapy.

The Isomorphs of Family Therapy and Family Therapy Training

The interrelationship between one's theory of the mechanisms of therapeutic

(family) change and one's view of the mechanisms of trainee learning (trainee change), provides a beginning point of correspondence between a model of training and model of therapy. In Structural-Strategic therapy, the introduction of greater complexity into family systems is defined as a central objective. Likewise, training from this viewpoint is guided by an overarching training objective: the generation of a broader conceptual and behavioral range (complexity) with trainees. Further, just as the therapist challenges the realities of family members, the trainer similarly challenges the often narrow, unidirectional, and monadic epistemologies of trainees in order to facilitate adoption of a contextually sensitive, systemic orientation.

Just as Structural-Strategic therapists emphasize the competencies and untapped resources of their families, trainers from this orientation parallel this accessing of strengths with their trainees. Rather than working only from a deficit-focused view of trainees, supervisors build upon existent, but previously unavailable resources. The importance of a clinician's ability to skillfully blend support and challenge also exists in the training domain. From this view, trainees learn/change when they are challenged in conceptual and behavioral ways, yet these challenges lose their efficacy without support.

A Structural-Strategic therapist is a creator of contexts, an architect of settings that can allow alternative transactions to occur. Minuchin discusses how different social contexts influence different "partial **selves"** to become evidenced. A trainer's task is to create a learning context that accesses the most therapeutic partial selves of the trainee. In therapy, such contexts are created through the technique of enactment--a procedure which prepares, then puts family members in direct contact with each other. It embodies, in an experimental and experiential fashion, a direct challenge to present patterns of relating, and introduces a new arena for change. The corresponding locus for change (learning) in the training domain **is live** supervision (Montalvo, 1973; Liddle & Schwartz, in press). This context emphasizes a learning-by-doing philosophy (experiential aspect), and values a spirit of risk-taking in trying on new behaviors (experimental aspect). Just as therapists organize enactments among family members, so too do supervisors organize contexts between the therapist and the family.

> In therapy, such risk-taking and trial-and-error behavior must occur under the safety net of a solidly joined relationship, as controlled crises are induced to push families beyond previously handicapping thresholds of behavior. Relationships between therapist and trainer are no less crucial. Similar crisis induction occurs in the learning process, also requiring a relationship context capable of tolerating such stress.
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> Both therapeutic and training relationships are viewed as interpersonal systems. Thus, many dimensions common to all human systems can be identified as relevant. Therapeutic systems are organized along mutually negotiated/maintained hierarchies, are comprised of subsystems **delineated by boundaries** focused in their functioning. Training systems are no exception in these regards Accordingly, problems of continually violated hierachies, enmeshed or disengaged

subsystems, and the lack of clear, workable goals can plague both therapeutic and training systems.

Structural-Strategic therapists and trainers believe that change and therapy are best thought of as occurring in stages. Both systems develop and change over time. At another level, the family life cycle concept is paralleled by a similar evolutionary view of the trainee's developmental/learning cycle, as students encounter predictable tasks and crises in their training.

In assessing family dysfunction, therapists from this approach always include themselves in the unit of observation and diagnosis. Correspondingly, supervisors recognize their participation and membership in their assessment of the training system. For both therapy and training, assessment is not a one-time event. Rather, it continues throughout the clinical and educational process. Further, assessment is not divorced from **intervention in** either domain. That is, therapists and supervisors alike use feedback from their interventions to shape future change efforts.

Change facilitated in a family is often managed and consolidated to insure its permanency. Likewise, a trainer must utilize a network of skills to help students seal, generalize, and transfer learning which has occurred. Concerns for consolidation occur both at the **micro-level** during the training process as learning occurs, and at the macro-level with the termination of supervision, as trainees meet the political consequences for adopting a new epistemology.

Mirroring of Sequences

Thus far wee have provided a broad sketch of several areas of isomorphic connection between training and therapy. At this point, let us examine in more detail one of the most obvious and basic areas in which the teaching and clinical subsystems influence each other. We have termed this dimension the' mirroring of sequences.

Cognizance of how sequences and patterns of interaction replicate themselves at different system levels has long been of value to clinicians. Therapists track and eventually utilize this mirroring of sequences/patterns, as well as the manner in which such things as affect, mood, energy, and content are replicated in various subsystems of the family. Just as there is a mutually influencing interrelatedness to a family's different subsystems, so too is there a similar process of interconnection between the training and therapy domains. This allows, for example, parallel sequences of interaction to occur in these subsystems. For instance as a therapist becomes overinvolved in amassing more and more content, the observing supervisor, unable to recognize and break pattern, mirrors the preoccupation with verbal description by not intervening. Here, induction into a morass of content has occurred in both the training and therapy domains.

Knowledge of a system's tendency to replicate patterns at all levels of that same system is both a framework for understanding, as well as a tool for dealing with the inevitable induction in which trainers become involved. Live supervision cannot guarantee non-induction into cyclical, unproductive sequences of interaction. The glass separating the supervisor from the therapeutic system often

does not prevent that supervisor's unwitting participation in non-therapeutic patterns in a session. As but one supervisory technique, live supervision allows us a useful but not infallible vantage point, as well as a means of offering immediate help to the therapist/trainee.

Let us extend the previous example by adding more detail and offering a possible solution. Consider the situation in which a single-parent mother is hesitant and vague in dealing with her youngster's obstreperous behavior during a session. The therapist finds the behavior disruptive yet continues to ask the mother for additional information about the youngster's behavior at home, in school, and with friends. The mechanism of live supervision lets the supervisor intervene to get the therapist back on track. The therapist is told that he already has sufficient data to intervene. He agrees and complies with the suggestion to try and help mother deal more effectively with the child's behavior in the session. It is to no avail. The therapist cannot keep mother focused on the child's in-session disruptions. His interventions end in a speech by the mother in which she provides more examples of the misbehavior. Increasingly, the therapist feels the pull to do something himself with the child in the session, since repeated efforts with the mother have failed. Not surprisingly, as these sequences repeat during the session, the supervisor, too, experiences the tug toward abdication--the tendency to treat the therapist as if he might not be capable of competent behavior with the family. The supervisor might respond by abandoning the proposed direction. Or, he might decide to do the intervention himself--in both cases concluding that the therapist would be unable to succeed. Here, a trainer's knowledge of how sequences, content, mood, etc., have a tendency to be replicated within differing subsystems is, if not preventative, then at least suggestive of a useful supervisory intervention.

So much of a supervisor's effective behavior in these situations is dependent upon an ability to assess a (sub) system's functioning. As in therapy, supervisory assessment is ongoing, always includes the assessor (observer), and can be seen as the results on one's interventions (Minuchin's dictum: diagnosis is the result of one's interventions/assessment is based on a family's response to our therapeutic probes). In our example, the supervisor's assessment is similarly made on the feedback from several interventions. The trainer notices how the therapist lets mother off the hook during the session--his lack of focus and follow-through with her is replicated in the dyadic context of mother and child. During a behind-the-glass consult, the therapist declares: "I just don't know what to do, I can't get her to help the child behave." By this point, the supervisor realizes that, to use the phrase descriptively, "frustration and abdication are operating in the therapeutic system." The supervisor clearly does not want to become part of or perpetuate this process, which he has judged to be nonproductive and oriented toward keeping the family's (and therapist's) pattern s) the same. Moving out of sync with patterns not syntonic with therapeutic/supervisory goals is often difficult, but is aided by an accurate assessment of the sequences in the therapeutic and training subsystems, as well as by a sensitivity to our own affective responses to the system's feedback.

What is the next step, then, in transforming training and therapy's isomorphic connection into a concrete, workable reality? The supervisor must become clear on the nature of the sequences, content, mood, etc. , desired in the

therapeutic system deducing the rules which would be in operation when the target behaviors occur. Then, by establishing these rules with the therapist, and in essence, replicating the hoped for therapist-family interaction, affect, etc., with the trainee, the therapist will be more likely to help transfer (replicate) this new context with the family. Thus, we must not only see the replication of pattern s) between

subsystems as potentially negative. The phenomenon of context replication can be used in an intentional way to meet our training and therapeutic goals.

Consider, for example, the therapist who has difficulty in creating needed intensity in sessions. In an interview situation, our therapist both contributes to and complies with behaviors which lighten and/or divert the affective intensity away from developing conflict. In this case the therapist becomes uneasy with a basic unbalancing operation, in which he is required to temporarily but unequivocally take the side of a beleagured wife. Here the supervisor's ability to conceive, construct, and engage in an enactment with the trainee in a manner similar to that desired between therapist and family (and eventually between wife and husband) might be instrumental in facilitating the needed shift. Thus the supervisor changes in relation to therapist, therapist changes in relation to family, and family members change in relation to other family members. Still, one possibility at this point is that the hesitancy and the lack of conviction in the therapeutic system can become operative in the supervisory system as well. In intentionally (perhaps unavoidably) lineal language, the training subsystem can "catch the dysfunction of the adjoining therapeutic subsystem." (The examples are intentionally unidirectional for illustration purposes. The ripple effect between subsystems is, of course; never only in one direction.)

On the other hand, in this example, the supervisor might challenge the reality of the trainee in the same way in which a therapist does so with a family member. To heighten the needed intensity and focus, our supervisor might have a during-session consultation with the trainee in the observation room. Trainers, like therapists, are attuned to how realities are created through spatial manipulation. What might our supervisor say to begin the desired process?

> The wife gets right on the verge of being able to negotiate with her husband then backs down. Your attempts to side with her have not been firm or clear enough. Stay with her longer during the next sequence in which you're preparing her to talk with him. Then, only help her as necessary when she discusses the issue with her husband. I know this is hard for you to do, but you're at a critical point now with them. I think you can push past your own discomfort here and stay on her side long and hard enough so she can begin to really deal differently with her husband right here in the session--that's your goal."

In this instance the supervisory intervention emphasises intensity, the stage of the intervention (supervisory interventions like their therapeutic counterparts also can be thought of in stages), and in part, gives "permission" to do something with which the therapist experiences difficulty. In another sense, through the supervisor's tone and style of delivery, the consultation itself was an intense, focused, stage-specific, and side-taking (supervisor unbalances therapeutic system by siding with the therapist) enactment.

If the therapist's behavior changes during the next few sequences with the couple the change could be explained *through* insight/understanding or modeling theories, but from the present framework, our theory of trainee change parallels that of family change (which are different from modeling and insight). In this example, several domains which work at the intersection of training and therapy are in simultaneous interaction. First, the intervention challenges the reality of the

therapist. His statement about now knowing what to do becomes transformed into a new possibility of change. Ultimately, of course, the reality of the family is challenged as well. The couple's reality of: "I can't talk with him about that"/"She can't talk to me in that way," evolves to a dialogue in *which* the partners negotiate disagreements together, with greater parity. The intervention challenges these versions of reality in a manner which offers support, emphasizes competence, and pushes the therapist, and couple, past previous thresholds of behavior. In this fashion, the behavioral range and complexity of our therapist and couple was broadened. Central to this process is the supervisor's flexibility and own range of alternatives--the ability to use one's self in a myriad of ways with the trainee. The therapeutic phrase "use of self" applies equally to trainers. Finally, in our example, new experiences of relational reality were created--first between supervisor and therapist, then between therapist and the couple, and finally between the couple themselves. Similar to clinicians, supervisors are knowledgeable in the ways of constructing contexts of interaction-interpersonal events which offer alternatives to supervisers and family members alike.

Summary and Conclusions

Clearly, the isomorphic nature of training and therapy can be examined at multiple levels, from the assumptions **governing_change/learning** to the **skills** necessary for both. **Again** such an analysis is viewed valuable for trainees regardless of their particular theoretic allegiance. While such a framework can serve'as a map of an often **vague territory,** the representation should not be confused for that *which* is represented. This blueprint is neither a solution, nor a panacea for all supervisory ills. As an arbitrary framework, it *highlights* relevant isomorphs between two related domains, spotlighting what is similar between domains that are different. However, alternate and complementary schemas are ,necessary and should be* explored. For example, the examination of what is different between the two domains that are similar would be quite valuable. Such an analysis clarifies that training and therapy are two different processes and should not be seen as interchangeable. An overemphasis or **overly literal** translation of the isomorphic relationship could lead to the erroneous conclusion that training is simply therapy with one's students.

Further, this 'phenomenon 'of context replication is not conceived in a lineal, unidirectional way. Rather, the rules of a system and the context itself serve to constrain and influence the behavior of its members. It is less than useful to assume an overly predictive, "if-then" position on inter-subsystem influence. Rather, we suggest adoption of a posture similar to that utilized by physicists in their resolution of the particle/wave paradox. They speak of matter, at the subatomic level, of not existing with a reductionistic certainty, but as showing "tendencies-to-exist: Similarly, atomic events do not occur with certainty at definite times and in definite ways, but rather show "tendencies to occur"

(Capra, 1982, p. 80). Such analogies allow us to think about context replication and mirroring of sequences in other than the familiar, but anachronistic, dominoeffect, cause-and-effect ways.

For now, however, it is hoped that this developing sketch of the isomorphic nature of training and therapy can begin to close the conceptual gap between the training and

clinical domains, and in the process, provide additional guidelines for learning and change.

Footnotes

Minuchin and Fishman (1981) have also contributed to our working formulations of the usefullness of the isomorphism principle in training and therapy. _They use isomorphic (iso: equivalent; morphs: structures) to describe those transactions in the family that are dissimilar in content, yet are identical at the level of form or process in that they follow the same system rules.

Many other sources outside of the psychotherapy field per se have enriched our understanding of the isomorphism principle. In this regard, the following are among those that have been particularly helpful: Bateson (1979; see also Liddle, 1981), Bronowski (1978), Burnham (1973), Capra (1975, 1982; see also Liddle, 1982), Hofstadter (1979), Jantsch (1975, 1980), LeShan & Margenau (1982), and Senechal & Fleck (1977).

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