# Modeling Workplace Conflict With "Systems Theatre"

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### ABSTRACT

Applying systemic analysis to examples of the author's practice, this paper presents evidence for the efficacy of a theatre-based mode of systems modeling.

**Keywords**: Augusto Boal, Theatre of the Oppressed, Systems Thinking, Workplace Conflict, Causal Loop Diagrams

### **1. INTRODUCTION**

Conflict Theatre @ UBC (CT@UBC) is an initiative of the Human Resources Department of the University of British Columbia (UBC) in Vancouver, Canada. In collaboration with UBC's Department of Theatre and Film, and in line with the goals of the university's Conflict Engagement Framework, the program seeks to cultivate "conflict literacy" across faculty and staff defined as the basic awareness, knowledge, skill and practical wisdom for productively engaging in conflicts in which we find ourselves.. The principal modality of CT@UBC's work is Forum Theatre featuring plays created and performed by diverse casts of UBC employees for audiences of their peers at various professional development events.

Forum Theatre was originally developed in the 1960's and 70's by Brazilian artist and activist, Augusto Boal, as part of his "arsenal of the Theatre of the Oppressed" (TO). Given Boal's explicit wish that his methods be strictly employed within a "social justice" context and certainly not in any kind of "corporate" environment, some in the TO community might object to its use in the university context. However, the CT@UBC initiative is adamantly not focused upon simply making employees more "efficient" in the manner that Boal feared [1]. In the spirit of the aforementioned UBC Conflict Engagement Framework it seeks, rather, to explicitly enable all members of the university community to pursue our commitment to inclusion, collaboration, and innovation as three priorities to be advanced by all the work of our institution. Conflict engagement aims to concretize these commitments through realistic and practical efforts, noting that the pursuit of inclusion, collaboration and innovation requires engaging with conflict.. The Framework also aims to make concrete the aims of UBC's Respectful Environment Statement in establishing employment and educational practices that respect the dignity of individuals and make it possible for everyone to live, work, and study in a positive and supportive environment, free from harmful behaviours such as bullying and harassment. Finally, the work of CT@UBC is anchored in an ongoing commitment to the vision of a university as a public good. In pursuing the ideals outlined above, CT@UBC is designed to serve as much as a mechanism for openly and safely critiquing the structures and policies of the institution itself as it is for the development of the personal capacities of individuals within the institution.

Forum Theatre has been further developed by many international practitioners including Vancouver's David Diamond whose Theatre for Living (TfL) has "moved away from the binary language and model of "oppressor/oppressed" and now "approaches community-based cultural work from a systems-based perspective; understanding that a community is a complexly integrated, living organism." (theatreforliving.com).

The Theatre for Living website describes Forum Theatre as follows:

In Forum Theatre, we show the audience the play all the way through once – the play builds to a crisis, and stops, offering no solutions. The play is then performed a second time, where audience members can then stop the action and enter the stage themselves, by replacing characters with whom they identify and try to solve problems or issues inside the story. The rest of the cast stays in character and improvises. [...] The theatre becomes a creative laboratory where we can try ways to transform ourselves, our communities, and the world. (theatreforliving.com)

While Diamond is not the only contemporary practitioner to be influenced by developments in Systems Theory (see [1]) and the potential benefit of a more direct and overt engagement with the tools and techniques of Systems Thinking has been recognized and brought to the attention of the TO community [2] major adaptations to Forum Theatre practice in order to maximize the mutual support these bodies of work might lend each other have not been forthcoming in any pronounced manner. The need for such innovations appears more acute in light of Luong and Arnold's reflection upon the "frustration at the lack of change and impact in their communities" expressed by many TO practitioners and their suggestion that " perhaps the missing link between the frustrations the facilitators experienced and creating the change that Boal once envisioned for TO techniques may lie in the conscious ability to use systems thinking skills." They go on to reflect that:

Currently, forum theatre seems to be the TO form of choice to use in tackling problems. It provides a great structure that facilitators may adapt and utilize to explore different perspectives, allowing a community of viewers to make changes. However, the forum theatre pieces that we have participated in often tackle issues on a surface level, lacking a big picture view. Whether this issue is caused by inadequate facilitation or a need to present a more holistic and systemic scenario seems to depend on the performance. If further development can improve these workshops, we believe the TO facilitators can help create bigger changes in their communities.

Like Luong and Arnold, who "envision formal, long term research" to assess and address these gaps in TO practice, I have embarked on a program of research to try and remedy this state of affairs through the development of Systems Theatre [3]. To that end, Conflict Theatre @ UBC has served as the test-bed for the gradually increased application of systems tools within the creation and performance of Forum Theatre events. Conversely, it is vital to note that this effort is equally inspired by a desire to be of value to the Systems Theory/Thinking/Science communities; in particular, by going some ways to fulfill the wish, expressed most directly by Werner Ulrich, to "pragmatize the kernel of the systems idea" for the wider public. [4] In my view, an adapted form of Forum Theatre is the ideal vehicle for this task and my hope is that

efforts like those of Luong and Arnold and myself to make explicit the natural affinities between TO/TfL and Systems Theory can lend credence to Ross Ashby's assertion that ' "the discovery that two branches are related leads to each branch helping in the development of the other. " [4] The general features of the proposed Systems Theatre can be found in [3] and empirical evidence of the increased levels of reflective awareness it can facilitate for those involved in its practice are detailed in [5] The current paper will offer examples of the kinds of generalizable insights that can be teased out of the dynamic flux of a Forum Theatre event when Systems Thinking "lenses" are applied to the analysis of individual audience interventions. It is hoped that these examples will add credence to Luong and Arnold's claim that "the conscious ability to use systems thinking skills" is, indeed, the "missing link" to greater long-term "change and impact" in our communities of concern.

### 2. SYSTEMS THEORETICAL FRAMEWORK

The proposed Systems Theatre seeks to unveil leverage points at both the organizational and personal level. In order to do so, it engages two distinct methods of analysis: Systems Thinking at the organizational level and Perceptual Control Theory (PCT) at the personal.

# Systems Thinking

The phrase "Systems *Thinking*" is grounded in Donella Meadows popular book, THINKING IN SYSTEMS: A PRIMER [6] and is used advisedly to indicate that, while Causal Loop and Stock and Flow Diagrams will be employed as analytical tools, the rigorous mathematics of fully-fledged System Dynamics will not be applied. Instead, these tools will be used to more generally illustrate interactive relationships and systemic structures and to help identify the "archetypes" of systemic dysfunction identified by Meadows. To visually communicate these insights to audiences, it is proposed that the online modeling platform LOOPY be employed. (https://ncase.me/loopy/)

# **Perceptual Control Theory**

Perceptual Control Theory (PCT) is a cybernetic theory of behaviour originally developed by William T. Powers [7] applying selected ideas from control engineering to a conception of the human nervous system as a hierarchical organization of control systems. These systems seek to match present perceptual experiences with preferred, internally set goal states via homeostatic negative feedback loops that generate goal-seeking behaviour. This hierarchy begins with the most fundamental sensory perceptions, and subsequent basic motor activities (e.g. maintaining balance), at the bottom, and extends to more abstract principles of self-perception (e.g. ethical behaviour, aspirations for personal character etc.), and subsequent complex social behaviour, at the top. Each level has its intrinsic reference value set by the level above it. This theory offers profound utility to the Systems Theatre project given that it is entirely consistent with research on the cybernetic nature of the Stanislavski System of Acting and the Naturalist theatre [8, 9], provides a method of cyber-systemic analysis at the level of the individual that is compatible with those employed at the organizational level (e.g. System Dynamics inspired Systems Thinking) and is supported by a robust body of empirical validation [10]. It also contains a parsimonious theory of conflict as the struggle between two or more control systems

seeking to bring the same variable to different states; either interpersonally (e.g. a negotiation between employee and employer over compensation) or intra-personally (e.g. during an emotionally charged department meeting, an individual's desire to both question authority and to be liked by everyone.)

### **Object of Study**

In the next section, the kind of systemic analysis outlined above will be applied to the examination of interventions into a play made by members of an audience from a unit within UBC's Sauder School of Business. While the interventions and discussions described below reflect the events that took place during the actual performance, the systemic analyses outlined here were formulated upon subsequent reflection and, as such, were not presented to the audience as part of a standard CT@UBC performance. The represent a model of the fully integrated Systems Theatre toward which the author is working and are being used to inspire new modes of play creation and analysis in further exploratory work.

# 3. THE PLAY

The following excerpt is the final section of a short Forum play developed by an ensemble of UBC employees<sup>1</sup> during CT@UBC's 2011 intensive. It portrays a meeting in the fictitious "Department of Excellence" between department head, Chantal (a recent external hire), long-time administrator, Jen, long-time faculty member, Fran, and recently hired communications specialist, Maura. After a bumpy beginning due to chronic lateness, and an awkward interaction around overlapping requests for vacation time, the group finally gets to the main item on their agenda.

**Chantal:** Next item: orientation. We are going to brainstorm around what our unit wants to do for faculty and staff orientation. *(Jen raises her hand)* Yes Jen.

**Jen:** We did this at the last meeting Chantal. You weren't there, but we did it. We spent at least 2 hours brainstorming and we had a whole flipchart full of ideas.

Fran: We did.

Chantal: Ok, perhaps you could update me on that.

Jen: Maura?

**Maura:** So at the brainstorming we came up with a ton of ideas for orientation which I have handy here. Although at some point we did spin our wheels. Most of the ideas are related to the resource booths that we're going to have for the whole orientation.

Fran: Not with faculty session, no.

**Maura:** This will be my first orientation, so I guess I am confused about how I'm working with you Fran for the faculty orientation.

Fran: You aren't working with me for the faculty session!

**Chantal:** Actually it is my expectation that you should be, Fran. We have talked as a team, about the faculty and staff becoming a joint session and perhaps you could take a couple of minutes to inform your new colleague here in terms of what happens in faculty orientations.

**Fran:** Yes, of course, Chantal. Maura, at orientations Staff and Faculty do a joint session in the morning and then we break into two groups for the afternoon sessions. We have always done it

<sup>&</sup>lt;sup>1</sup> The ensemble members included Maura Cruz, Julie Stockton, Judy Chan, Joseph Topornycky, Zack Lee and Nihan Sevinc.

this way. You and Jen look after staff; I look after faculty - they break into two groups, one focused on research, the other on teaching and learning.

Maura: How am I involved with the faculty then?

**Fran:** You're not involved in the faculty sessions! You do staff orientation.

Jen: Can I say something, Chantal?

Chantal: If it's relevant Jen.

**Jen:** It is. Can I be honest? I really resent the fact that we're spending so much time on this when, really, it's Maura's responsibility. Sorry, Maura.

**Fran:** I have to agree. (*Meanwhile, she has already started checking her e-mails on her phone*)

**Chantal:** Well PEOPLE, let's step back for a moment and think about how we can better incorporate Maura to <u>our team</u>. I think that... || Fran, do I have your attention right now? You seem a little preoccupied.

**Fran:** I'm actually trying to get urgent stuff done cause this doesn't really apply to me.

**Chantal:** Actually it does apply to you. <u>As a team</u>, what we're trying to do is to come up with strategies on what to do around staff and faculty orientations.

**Fran:** So, you've been talking a lot lately, Chantal, about us as a team. Quite frankly my understanding of "team" is we participate in all operational aspects of the team.

For example: the selection of a new team member. Jen and I weren't included in Maura's recruitment, nor were we consulted before you hired her. You made the decision entirely on your own, and now I'm suddenly expected to train her. No disrespect to Maura - I'm sure she's a nice person – but I don't have the time to train somebody new right before the orientation, especially when they're not getting it.

Chantal: Fran! I think that this conversation has crossed a boundary.

**Fran:** Boundaries were crossed long before this conversation, Chantal. I'm sorry, I have to excuse myself.

Leaves the room.

End of Scene

# 4. INTERVENTIONS

### Intervention One - Action

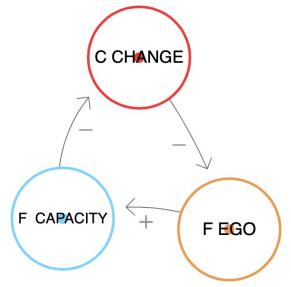
Audience member *A* chose to replace the character of Chantal and, as an introduction to the topic of the orientation session, praised the many years of excellent work that Fran had put into developing a very successful template for the faculty sessions and commended the very solid foundation upon which any innovations generated with their new team member, Maura, would rest. As the conversation moved fully into the discussion of potential adjustments to the format, Fran still seemed somewhat uneasy but did not attempt to completely block Maura's involvement. Subsequently, the tone of the meeting did not escalate and the meeting proceeded in a calm and collegial manner until the Joker (facilitator) called an end to the scene and began to facilitate discussion of the intervention.

### Intervention One – Discussion

Speaking as the character, the actor playing Fran confirmed that the acknowledgement of her long-standing contributions to the workplace did, indeed, make it easier for her to begin to engage in a discussion with Maura about possible innovations to the procedures she had developed. Of particular importance was the sense that the extant faculty orientation sessions that she had designed had legitimate value and that the desire for innovation was not an indication that the work that she had done previously was fundamentally flawed or inadequate. Drilling down a little further in our discussion, "Fran" revealed that, having been in her job for so long, much of her very sense of self-worth was enmeshed with her professional identity. Thus, urgent and repeated demands for change left her feeling deeply threatened and triggered what Systems Dynamics practitioner, John Sterman, might call "defensive routines." [11]. These feelings, and subsequent behaviours, were significantly mitigated by the alternative approach enacted by audience member A.

# Intervention One - Systemic Analysis

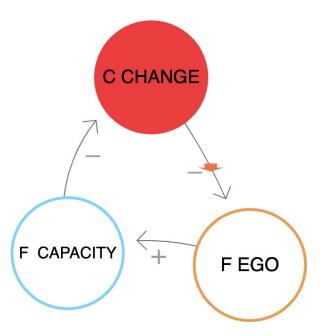
Given that many audience members raised their hands when asked if they identified with Fran's close association between professional identity and self-worth, it seems prudent to attempt to generalize the insight gained from this particular intervention in an attempt to extract a principle that might be applied in similar "change management" situations beyond the scope of this particular play and the particular individuals that it portrays. One way in which this can be approached is through a pair of Causal Loop Diagrams illustrating the feedback loops at work in both the initial scenario portrayed and the subsequent As with all descriptions of "non-physical" intervention. systems (and possibly other types as well), the names given to the interacting "elements" do not reflect an objective definition of reality but are, rather, dependent on the conceptual schemas employed by the observer (in this case, the Conflict Theatre Joker.) As such, these diagrams are not offered as "the" way to see and describe the dynamics at work but, simply, as "a" way to see and describe them that will only prove its worth if it results in insights and applications that lead to "successful" interactions in the future. Even then, the diagrams will not function as descriptions of the "truth."



# FIG. 1

Fig. 1 utilizes the modeling platform, LOOPY, to portray the initial scenario as a feedback loop which is structured so that Chantal's increasing demands for change will drive down Fran's ego strength which will drive down her capacity for change which will drive up Chantal's demands for change.

The presence of an even number of negative links guarantees, of course, that this will be a reinforcing loop.



# FIG. 2

Fig. 2 shows the states of these variables after LOOPY has run the model for 8 time steps beginning with the introduction of one unit of "Chantal's demand for change" into the system. Fran's ego strength and capacity for change have bottomed out at the lowest possible level and Chantal's demand for change has reached its upper limit.

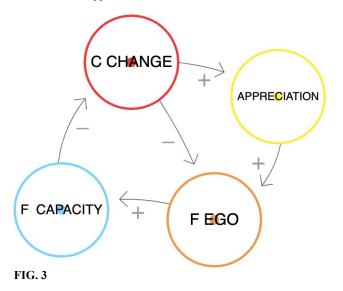


Fig. 3 shows a new structure reflecting audience member A's intervention in which an additional balancing loop (with only one negative link) has been created through which expressions of "honest appreciation" are triggered upwards by increasing demands for change. Both will reach Fran's ego strength at the same time.

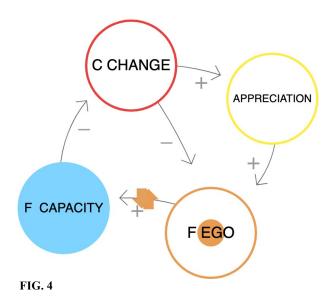


Fig. 4 shows the states of these variables after LOOPY has run the model for 9 time steps; again beginning with the introduction of one unit of "Chantal's demand for change". Chantal's demands for change and expressions of appreciation are now both at zero while Fran's ego strength is at a median position and her capacity for change is at its maximum.

The overall effect of the model is to demonstrate that, if the leader of an organization in need of change learns to link an equal amount of honest expressions of appreciation for work done up to the present with demands for innovation, there may not be a complete and automatic conversion (as evinced by the lingering sense of unease exhibited by Fran during the intervention) but new conversations will at least become possible through the correction of runaway positive feedback and, with persistence, there may eventually be a tipping point at which team members with less robust ego-strength may experience a lasting shift in their ongoing capacity for change. While such a general principle may already be recognized within the Organizational Development, Change Management, and other social science literatures [12]creating and projecting the Systems Thinking diagrams above for a Forum Theatre audience to view during post-intervention discussion may provide a novel and engaging way to communicate this idea in its systemic fullness and can, as in this case, provide a powerful short-hand method for generalizing insight from what may have begun simply as a kind of "gut instinct" for positive action from a community member. It is also an efficient manner in which to quickly and clearly "pragmatize the kernel of the systems idea" (namely, circularly causal and non-linear interactions of elements) for a general audience.

#### Intervention Two - Action

Audience member B chose to replace the character of Maura and de-escalated the entire situation by taking any immediate innovations off the table. Instead, she offered to simply shadow Fran for this year with an eye to developing any possible innovations to the faculty orientation sessions for implementation the following year. As a result, Fran, Jen and Maura then quickly agreed in a friendly and enthusiastic manner that the meeting was basically ready to wrap-up while Chantal was left looking on with a rather disconcerted expression on her face. It was at this point that I, as the session Joker, froze the scene and began facilitating discussion of the intervention.

# Intervention Two- Discussion

In our discussion, audience member *B*, who, not coincidentally, was the head of the unit hosting this performance, said she was motivated to make this intervention by having personally learned the lesson of "too much, too fast" when she had first assumed leadership of the unit and attempted to implement a fairly sweeping program of change. Her colleagues smiled and nodded knowingly and there was even some laughter as the group seemed to acknowledge a shared experience that had been difficult but that they had come through together in a positive manner. The candidness with which B owned the selfcreated difficulties she had experienced early in her tenure demonstrated a remarkably mature leadership style. However, from my point of view as the Joker, it was vital that the group confront the fact that this intervention was carried out by the highest-ranking member of a real-life unit replacing the most junior member of the fictitious unit portrayed. Employing a Joking technique learned from my mentor, David Diamond, I asked the original "Maura" how easy or difficult it would be for her character to implement the kind of approach we had just witnessed by the intervening "Maura". Unsurprisingly, she replied that it would, basically, be impossible given her position as the newest member of the team who had been specifically brought in to help implement Fran's program of change. For her to feel sufficiently empowered to unilaterally change course in this manner was a stretch to say the least. This led to some further rich and frank discussion about differing levels of equity in hierarchical organizations and their impact on the ways in which conflicts unfold. The need to build mechanisms to support newer employees in this area was identified.

I then turned the conversation to the actress playing Chantal and asked how the meeting had gone for her. She revealed that the look of displeasure I had noticed indicated her uncertainty around explaining to the Dean, to whom she must report, that the program of renewal for which she was specifically hired would be proceeding at a pace slower than requested.

# Intervention Two – Systemic Analysis

An intervention such as this provides a perfect opportunity to discuss the System Archetype identified by Donella Meadows as "Escalation" in which two sides of a conflict are locked in a mutually amplifying feedback loop of resistance to each other. It does so via *B*'s demonstration of the only real antidote Meadows offers beyond not getting locked into such a loop in the first place; namely, "unilateral disarmament." (Meadows and Wright, 2015, p. 124-126) ) By completely letting go of her immediate need in favour of a longer-term solution down the road *B* was able to stabilize the situation in the meeting room.

From a systems perspective, the aforementioned discussion around "equity" could also be framed in terms of the concept of "leverage", and the similar hierarchical factors that impact individuals' perceived possession of this potent systemic element when faced with challenging and confrontational situations, could also be explored.

The dilemma that Chantal found herself in at the conclusion of this intervention also opens the door to a discussion of system boundaries. While the "interaction system" comprised of the four individuals onstage in our play may have been stabilized in terms of escalating conflict, it is nested inside a larger system that will be subsequently perturbed by the actions taken in the intervention. This perturbation may lead to very difficult emergent outcomes for Chantal. Even the very decision as to what to put onstage and what to leave offstage in a particular Forum Theatre play represents a boundary judgment to which various methods of critique can be applied and demonstrated.

# Intervention Three – Action

Audience member C replaced the character of Jen and, when the conflict in the room began to escalate upon Fran's repeated insistence that Maura would not be involved in the Faculty Session, "Jen" gently offered that, while Faculty Session involvement might need to wait until the following year, she could spend extra time with Maura to make sure she is as fully integrated into this year's Staff Session as possible. Maura quickly grabbed hold of the "lifeline" Jen had thrown her and the two began some basic brain-storming conversation with a fairly chipper tone of collegiality. After looking on for a minute or two watching Jen and Maura solidify their new connection, Fran surprisingly broke in and suggested that, perhaps, there might be one or two ways Maura could be involved in the Faculty Sessions this year after all. I froze the scene at this point and took us into discussion.

# Intervention Three – Discussion

*C* revealed that her intention was merely to assist Maura in a more collegial fashion. In no way was she seeking to shift Fran's behaviour through her own. Consequently, Fran's shift in tactic and tone was as much as surprise to her as it was to me as facilitator. When I questioned "Fran" about her somewhat sudden "change of heart", she told me that, given Jen's generosity towards Maura, it had now become impossible to be as resistant to Maura's involvement without "appearing too unreasonable."

# Intervention Three – Systemic Analysis

The concept of "leverage" is, once again, well illuminated by this intervention by the surprising "ripple effect" of the change in approach that *C* brought to the character of Jen that then went on to generate a change in Fran. In combination with the previous intervention, it reinforces the idea that systemic leverage is not confined to the individuals with the most overt "official" power; in this case, Chantal as Department Head and, secondarily, Fran whose tenured faculty position is what empowers her to be so flagrantly oppositional to her nominal "superior" (Chantal) in the first place. So, how is the untenured staff member able to utilize this degree of leverage over the behaviour of the tenured professor? A systemic explanation can be given using the tools of PCT.

If there are "present-time" perceptual variables that Fran is seeking to control relative to preferred states, the most obvious one could be called: *Maura not involved in Faculty Session.* Repeated attempts to disturb this variable from its preferred state (i.e. Chantal's repeated assertions that Maura should be involved) are triggering Fran's adaptive compensatory behaviour (i.e. direct expressions to the contrary and other "defensive routines" including disengaging and working on her phone). However, according to "Fran's" comments in the post-intervention discussion there is clearly another variable at play here that we can call: *myself as reasonable person.* As is often the case with the kinds of variables covered by PCT, it does not enter the awareness of an observer (perhaps, even the self-observation of Fran) until it is disturbed from its preferred state. In this case, it is disturbed by the actions of C's version of "Jen" who, rather than reinforcing Fran's behaviour as she does in the initial scenario, offers to collaborate more fulsomely with Maura. This indicates a number of features of the control system hierarchy at work in this interaction.

In Controlling People: The Paradoxical Nature of Being Human, Richard S. Marken and Timothy A. Carey begin their discussion of the importance of gain in PCT with a highly colloquial definition of the term: The "gain" of a control system refers to how much output the system produces per unit error. That is, gain is measured in terms of how much "oomph" a control system puts out per unit increase in the discrepancy between the state of the controlled variable and the reference for the state of the variable. A high gain control system is one that produces a lot of oomph per unit error; a low gain control system produces very little oomph per *unit error*. [13]

Given that, as humans, we are controlling for multiple perceptual variables at the same time (literally, the capacity to "walk and chew gum" at the same time) the relative levels of gain attached to each variable have a significant impact on our behaviour. Marken and Carey use a familiar example to illustrate this principle.

In a person who contains multitudes of control systems, the perceptions controlled by high gain systems can be considered more important to the person than those controlled by low gain ones. If the perception of dieting is controlled with higher gain, then the perception of hunger, then control of dieting can be considered more important to the person than the control of hunger. This is relevant to self-control because a high gain control system can overpower a low gain one. If dieting is more important than not being hungry then the diet control system can overpower the hunger control system and effectively control its behaviour. The person will seem to have exhibited self-control through willpower. But it is actually a stronger, higher gain control system overpowering a weaker, lower gain one. (2015: p. 88)

In the case of our play, it could be said that, for the character of Fran, the system controlling the perception of myself as reasonable person actually has higher gain than that controlling Maura not involved in Faculty Session. The critical point is that the perceptual level of the former is not significantly disturbed until Jen abandons a program of "defensive routines" similar to those employed by Fran. In other words, the reference and perceptual values of Fran's myself as reasonable person match as there is at least one other person in the room who is behaving in a similar fashion. As long as this higher gain system has its perceptual variable right where it wants it, the lower gain Maura not involved in Faculty Session is able to be in the "driver's seat" of Fran's behaviour. The removal of Jen's reinforcing behaviour creates a new error signal for Fran's higher gain system which subsequently, overpowers the lower gain Maura not involved in Faculty Session system and initiates behaviour to remove the error signal for self as reasonable person, even though this creates an error signal for the former. It may even be that this has triggered in Fran a process of reorganization, which is the name assigned by PCT to the recalibration of our reference values themselves. Or, this might take place when Fran has an opportunity to reflect upon the events of the meeting after the fact.

It is fascinating, and essential, to note that the actor playing Fran reported that she did not anticipate ever behaving in this way in the role until she was in the midst of Audience Member C's intervention and, literally, "felt" the growing emotional effects of potentially appearing unreasonable to her other colleagues following "Jen's" about face. This is a powerful demonstration of the manner in which an individual can be entirely unaware that they are even controlling for a particular high gain variable until it is disturbed by an unexpected change in the environment that pushes the perception of that variable out of the acceptable range.

As a potentially generalizable lesson regarding organizational behaviour, a systemic analysis of this intervention reveals the way in which, in a moment of impasse, the willingness of a single individual to model the kind of behaviour necessary for compromise can have a powerful rippling effect upon even severely entrenched individuals who, at the end of the day, must remain mindful of the optics of their behaviour in a team environment. Again, the relative position of authority in the official hierarchy of the organization does not entirely dictate the amount of potential leverage that an individual's behaviour might exert in such a situation.

### Proposal for a New Scene

It has been suggested by some audience members that the conflictual dynamics of this play are so historically ingrained that, by the time the action of the play begins, it is already too late for any intervention that could shift the interpersonal dynamics involved in any substantial way. For this, and other, reasons, we will often invite the audience to propose ideas for additional scenes to be improvised that can take place at any time before the beginning of our play as long as they consist of interactions between any of the characters portrayed. The most consistent suggestion is for an audience member to take the role of Chantal and have a frank conversation with Fran to try and get to the bottom of the sense of antagonism that they, as audience, have distinguished through their observation. Often, this is driven by a sense that, perhaps, Fran had applied for the job now held by Chantal and had been passed over in favour of the external candidate; a notion that the cast members know to be true in the "back story" of the play.

#### New Scene - Action

In one particular version of this improvised scene, the actor playing Fran quickly offered up this information in response to "Chantal's" expressed desire to "clear the air" between them. From this point forward, the audience member playing Chantal seemed at a loss as to how to proceed and seemed oddly paralyzed and befuddled as the scene seemed to drift "sideways." In orthodox "joking" fashion, I froze the scene at a particularly challenging moment and proceeded to use various "dynamization" techniques to unearth further layers of the conflict.

### New Scene - Discussion

The final directive of our dynamization session was for each of the participants in the scene to express their character's "secret thought"; defined as something that "is absolutely true for the character in that moment but that they would not say aloud in front of the other character's under any circumstances." In response to this directive, the audience member playing Chantal offered the statement, "I want her to tell me *everything*!"

In the ensuing unpacking conversation, I asked this participant why she seemed to be struggling to know what to

say next when, at the same time, she seemed to have such an urgent desire to have "Fran" tell her "everything." She replied that she also wanted to keep the tone of the interaction "positive." When I asked her if, indeed, it was actually possible to have Fran reveal all of the details about her feelings regarding her situation at work while, at the same time, guaranteeing a "positive" tone, she conceded, after a moment or two of thought, that it was probably not. She then, laughingly, gestured to the audience saying, "Everyone here will tell you I have a problem with control." A problem with control, indeed.

### New Scene: Systemic Analysis

From a PCT perspective, it is easy to see that our "Chantal" in this scene is struggling because she has two incompatible perceptual variables that she is trying to control: *Fran telling me "everything"* and *Fran staying "positive."* PCT predicts that, if the two competing control systems have equal gain, then they will cancel each other at a considerable expense of energy resulting in paralysis. When "Chantal" contradicted her secret thought with her expressed desire to "keep it positive", I realized that the "sideways" drifting scene we had witnessed in which "Chantal" was, literally, rendered speechless, was, in fact, a textbook demonstration of intrapersonal conflict from a PCT perspective.

Another component of PCT is the belief that reference values for a particular level of the control hierarchy are set by the level immediately above. In other words, the level at which an intrapersonal conflict is *caused* is always a level up from where the conflict is *experienced*. Any successful reorganization that might dissolve such a conflict must take place at that higher level or above. In this particular case, one could explore both the potential implicit or explicit organizational disincentives to the kind of candour Chantal is ostensibly seeking and the personal challenges she feels in terms of approaching "difficult conversations." Support from an HR coaching program might be helpful in shedding light on the latter front; particularly if coaches are familiar with PCT and are trained in the PCT based Method of Levels counseling approach designed to help those in conflict go "up a level" in their awareness. [14]

### 5. CONCLUSION

The LOOPY diagramming platform has some obvious limitations compared with other more advanced platforms such as Insight Maker. The most obvious of these is the fact that feedback is always emanating throughout the system in a single unalterable unit per time step and the user is unable to employ various mathematical functions to adjust differing amounts of feedback at different points in the system. Similarly, one cannot build in other mathematical functions that could regulate flows based on their comparison with desired levels of stocks. However, remembering that they do not represent the totality of the system but simply the relationships illuminated by the intervention at hand (whose impacts are, obviously, rippling throughout various other elements and relationships not visibly captured at this point) as well as the types of leverage revealed, LOOPY diagrams are certainly adequate for the kinds of introductory systemic insights generated "on the fly" in the heat of a Forum Theatre performance. Perhaps it is possible to build more detailed models of extant Forum Plays complete with mathematically specified feedback and flow functions that would make other types of insights available to Forum Theatre audiences. Efforts to do so remain part of the ongoing Systems Theatre research program.

In the meantime, it is hoped that the example interventions offered in this paper, as well as their basic analysis in systemic terms, have provided sufficient evidence that the relationship between Forum Theatre and system modeling proposed by the Systems Theatre project is a rich one that is well worth pursuing through future, expanded research collaborations.

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