

Asking Better Questions: Modeling Domestic Violence as a Dynamic Process

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History

I (MH) have taught the Domestic Violence class (which I introduced) at Trinity College now several times, and have become increasingly frustrated with what seemed to me to be (a) a limited range of possible pedagogic choices to "transmit the material" and (b) the consistent resulting learning outcomes for the students. The course is organized around the questions "*Why does he do it?*" and "*Why does she stay?*" as well as "*What are we doing about it?*" Because the predominant focus of the sociological, psychological, medical and biological research in domestic violence is on establishing correlations between various social, psychological, biological and behavioral variables and acts of domestic violence, it became clear to me that my habit of presenting the theoretical underpinnings and results of research and policy initiatives would inevitably produce knowledge which took the form of a sort of semi-clear snapshot-type picture in students' minds of the characteristics of batterers and survivors. They felt they understood domestic violence when they began to develop mental lists of background, personality or attitudinal characteristics and correlates of likely batterers and survivors. They would feel they had learned especially well if they could then link these characteristics in some kind of linear "causal flow" type of mental configuration (again, since this is the form that most of the research takes), without any sense of the influence which the ongoing dynamics (feedback loops, for example) of these various events have on the nature and quality of the relationship itself or on the factors which influence the relationship. It has occurred to me more than once that this mental model of a static list of characteristics may even contribute to dangerous perceptions in their personal lives. For instance, if their boyfriends do not possess very many of these background characteristics, they are not at risk of domestic violence. Conversely, if they DO possess a number of these traits, it is inevitable that they will be violent. Of course, this is simply not true, but I cannot blame the students for coming to this conclusion, given the nature of the knowledge they have gained from traditional sources and interpretations. This is a general view of the picture they seem to get:

Preexisting Characteristics + Anger = Domestic Violence

In addition to inaccuracies regarding the true dynamics of violent domestic relationships, students also emerge from these traditional classes with a misguided notion that unilateral policies (policies directed at alleviating one aspect of the problem) can have some significant beneficial effects. No matter how often I've taught that addressing and trying to eliminate one or two correlates will simply not solve the problem, it also seems logically inevitable that, having been taught that some things are "strongly correlated" with domestic violence, students come to believe that eliminating or reducing the strength of those correlated relationships will help solve the problem. Their view of the solution, then, suggests that:

$A + b + c \rightarrow D$; therefore reduce A \rightarrow reduce D

Or, alternatively, they emerge from the course with the hopeless feeling that, because the problem is so complex, nothing can be done. Both of these impressions are false, and, I believe, hinder their natural impulse to try to solve the problem.

Pedagogic dilemmas

In my experience, I have found it impossible to explain, using traditional lectures, in any organized and readily understandable way, the dynamics of battering relationships, or of the decision-making process by the batterer to engage in violence. Actions (or thoughts, or emotions) have consequences, which in turn feed back to influence future actions, thoughts and emotions. It is these consequences that further propel him, or both of them, into new situations, each with its own set of potentials for action, thought and emotion. Yes, he may (or may not) possess certain characteristics, background experiences or traits, but it is the dynamics of his life that propel him into violence, NOT the simple presence of those factors! Simple linear or correlational theorizing will not allow us to understand this *process*, nor how he "*got* to be the way he is."

It is most certainly the case that researchers in the field of domestic violence understand that there are strong linkages between various life "systems," and that understanding these linkages will help us better understand domestic violence. For instance, emotions link in some ways with behavior, and with beliefs/attitudes from the culture, etc. Making more explicit exactly how these factors are linked would, I felt, help our both students and professionals working in the field tremendously. It would help them in at least two major ways: (1) to avoid the list-making, pop psychology-type of false prediction (you have these characteristics, therefore you are dangerous; you don't have these, therefore you are safe) and (2) to learn to think through the processes happening in violent relationships. Some factors change, some do not, in the course of the dynamic development of any relationship.

Since learning seems to be more of a "constructive" process than an "assimilative" one. Students need to take some part in constructing their own knowledge. Those who learn don't simply assimilate and digest what is handed to them. I searched for a pedagogical method of helping them construct accurate knowledge about the development and maintenance of violent relationships. I was thus attracted to what system dynamics may have to offer in terms of illuminating domestic violence.

How this/these model(s) developed:

After initially learning about the basics of the system dynamics philosophy and modeling techniques, I began thinking about how to model the system of "his" (95% of all known serious domestic violence is instigated by males) decision-making process to engage in acts of domestic violence. We (at this point the modeling process became a collaborative one) intend to build a model of "her" dynamics, and then logically connect them, at some point in the future. For now we decided to start with what's happening primarily with him, while recognizing that the

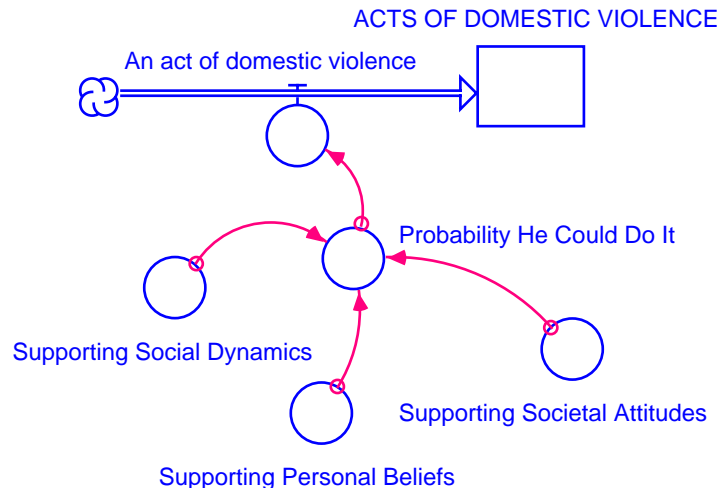
interaction between the two cannot be ignored (in fact, there is overt attention to her behavior in "his" model as well). Modeling in system dynamics requires you to make your assumptions very clear, and to then begin thinking about how the various relevant stocks (accumulations) are controlled by flows (movements into and out of the stocks) and influenced by converters (variables which feed into and out of the flows, and thus determine the amount accumulated in the stocks). You must also make very clear where the feedbacks occur within the system -- which linked factors reinforce or mitigate further change in the system. Ultimately, you aim to attach quantitative data to these various converters and flows, but for now, we are still working on establishing the theoretical or conceptual "skeleton" of the three subsystems. We are also asking for your help, and the help of anyone involved in researching or dealing with domestic violence, in advancing the accuracy of these models.

Initially, we found that this system breaks down logically into several general subsystems. These include factors which are present outside the relationship; decisions which lead to acts of domestic violence; consequences immediately following an act of domestic violence; and long-term consequences of domestic violence). But to start at the beginning, we need to explain the major thought processes that developed as we worked on building this initial model.

Development of the initial model

As described above, we began with the assumption that students need to see that there are a number of different types of interrelated factors (social, behavioral, emotional, from outside and from inside the relationship) that together produce domestic violence. They also need to understand the dynamic process of the development of domestic violence and the consequences of domestic violence; they need to understand the difference between the relatively "non-dynamic", predisposing factors (e.g. characteristics which may be in the background of the batterer and the victim, relatively enduring personality traits, emotional levels of maturity, a history of substance abuse, etc.) and the more dynamic factors which contribute to, and continuously change the character of, the violent relationship.

Illustration #1: The current literature implies a probability of violent acts based upon a combination of personal beliefs, societal attitudes, and other supporting social dynamics. This can be illustrated as follows:



An act occurs when the probability reaches some level. That probability is determined by some collection or combination of beliefs, attitudes, and social dynamics. These social dynamics consist of normative, interactive social/cultural patterns that allow men to initiate or continue battering. These include the fact that men generally make more money than women, and their careers are considered more important; women are generally blamed for their victimization; men are expected to be stronger, taller, older, and more socially powerful than their female partners; men are generally expected to be the prime family decision-makers; homophobia, etc.

Additionally, one of the assumptions with which we began was that over a period of time the tension level in any relationship will grow. But only in some couples does he actually commit a violent act against her. As a result of this act, the tension level temporarily seems to decrease. But it again begins to grow, then eventually, in the vast majority of these relationships, he commits another violent act. The time between violent acts gradually decreases, and it is also possible, though not known at this time, that the tension level may not ever return to its initial low level (i.e., tension levels may in fact decline less and less over time, between violent acts). But the tension does grow again, and he often commits another violent act.

Again, remember this was one of our initial assumptions, based on the existing research. What is happening here? What causes men to be violent against their partners? Why do they do this with increasing rapidity and severity?

These questions led us to look more closely at tension or anger as a stock ... an accumulation ... and to ask what feeds and what releases this anger/tension? (See Illustration #2)

Illustration # 2: Here we begin to deal systematically with his tension or anger. Notice that this is represented as a STOCK because it is a dynamic accumulation that can be seen to be fed and/or be dissipated.

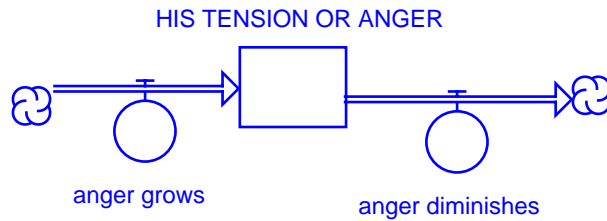
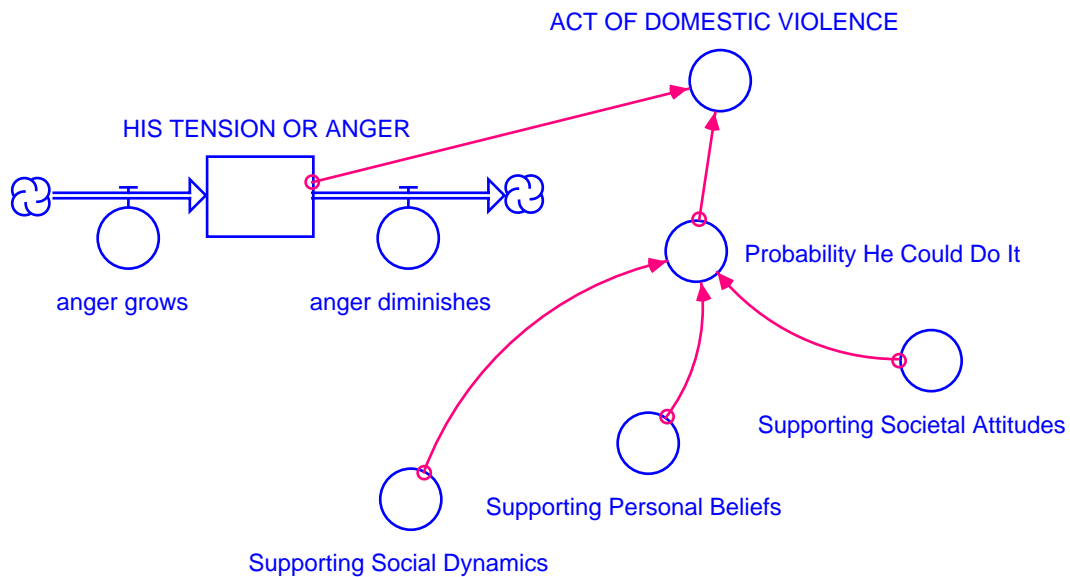


Illustration #3: The basic connection between anger and a domestic violence act is illustrated below. The amount or accumulation of anger, reaching a certain point, combines with predisposition/probability in contributing to an act.



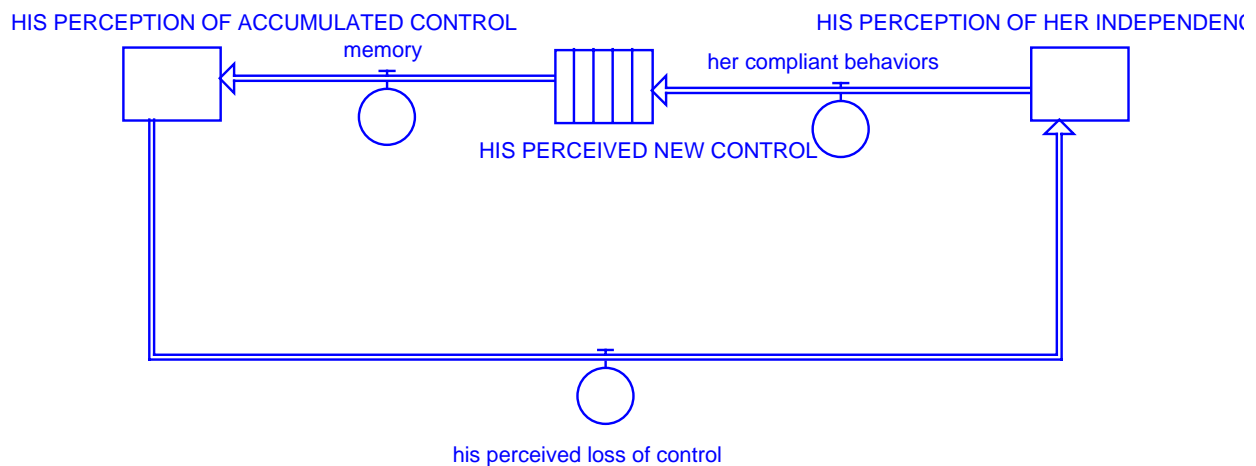
The Next Questions

Why is anger not dissipated in less violent ways? What controls the rate at which his anger/tension builds in relationships in which he is violent or non-violent? How do acts of domestic violence affect his anger/tension levels? How do outside events affect the levels of anger/tension? How does her behavior affect this? How is the relationship affected by this anger/tension?

In thus developing questions around the relevant dynamics between him and her, we also discovered these relationships aren't "closed systems" in a very important way. The research has shown that he seems to want "control" over her. The way we initially visualized this control, as a part of their relationship, was to picture his control over her as another stock...which builds up

over time...and which is evidenced by the percentage of her time that is devoted to conforming to his wishes. We were interested in trying to uncover and model the relationship between this control and his tension/anger. But, in consultation with other professionals working with batterers (JM), we realized that, while her resistance to his efforts to control her may or may not result in a buildup of his tension/anger, there are also other dynamics at work here. For example, even when he has succeeded in controlling a very large portion of her activities so that they conform with his every wish, he can still explode in violence against her. It seems that he sometimes perceives that, as she conforms, she is thus appearing to exert some control over him too. In other words, he can perceive that she is conforming in order to control his behavior. This perception may anger him as well. This dynamic may help explain the commonly-known phenomenon that she cannot win in these relationships -- even if she does exactly what he says he wants, she is still at risk. We were able to build this seeming contradiction into our dynamic model as well. We will show you the current state of that portion of the model later in the presentation, but here is the initial picture of that basic model.

Illustration #4: His perception of the distribution of control

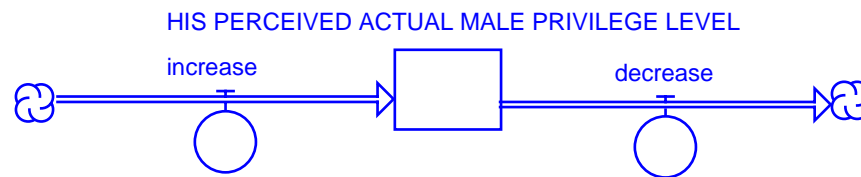


After further consultation with other professionals who work with batterers and victims, we realized that batterers also commonly share with the rest of the male population in our culture a sense of male privilege, a sense that men are entitled to be "at the top of the heap." In reality, most men do enjoy a real advantage in our culture, one that is composed of both greater power and prestige. The amount of this stock of combined power and prestige varies, depending on the man's race, class, age, education, occupation, and other factors. This "actual privilege level" can change, and its value affects several other factors in the model, including coping skills, deterrents to the first act of domestic violence, and the supporting social dynamics.

Perhaps even more than the batterer's real privilege level, his perception of privilege is also an important stock in this model. In addition, many men hold beliefs and attitudes that they "should" be dominant to women, but batterers seem to hold to these beliefs more rigidly than non-violent men. When their sense of male privilege is threatened, whether from within or from

outside the relationship, they may feel both the need and the right to defend that male privilege with violence, if necessary. This stock of perceived male privilege grows and diminishes throughout each day. According to many batterers' reports when in counseling sessions, its perceived growth and loss is a key factor in the dynamics of their decision to batter. As we thought more about this aspect of batterers' lives, we realized that the "list of characteristics" (or correlations) which is commonly associated with batterers (experience with battering as a child; beliefs/attitudes favoring violence; drug/alcohol abuse, etc.) may in fact not be the most effective "leverage points" for intervention. In fact, the fluidity with which a male's perception of his level of privilege changes may make this a more effective intervention point.

Illustration #5: His Perceived Actual Male Privilege Level

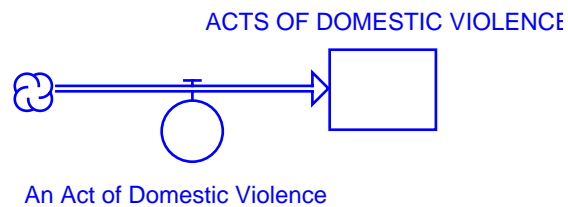


We have in fact planned to include attention to many of these predisposing “characteristics” talked about previously as factors in our "final model", but since they generally are very hard to change, since they certainly do not change as rapidly as his sense of male privilege does, and since the male privilege stock is also apparently more readily recognized by the batterers as a source of their decisions to act violently, perhaps it is a more important focus of intervention efforts. He seems to be especially rigid in his sense of his right to dominance, as well as especially sensitive to perceived threats to that male privilege by violations of what he firmly believes to be proper male/female role behaviors. He apparently, more often than non-violent men, senses a threat to his "masculinity" posed by her behaviors as well as by behaviors and situations outside the relationship. He also feels he has the right, maybe even the duty, to defend his masculinity in a "proper" way (by reminding her of her proper submissiveness).

Even if a man only possesses moderate, or even very scant evidence of the "predisposing characteristics" in the profile, he no doubt possesses a sense of male privilege, and if it is a particularly rigid one, he may be at higher risk of violence than someone who better fits the profile but has a less rigid need for dominance. Similarly, if he has developed few healthy skills for dealing with the inevitable tensions of life, perhaps coupled with this rigid sense of male privilege, even without ANY of the "predisposing characteristics", he may well be a candidate for committing violence against his spouse or significant other.

We also created a stock of actions, because it is clear that the “acts” themselves, both as they are committed, and as they accumulate over time, produce consequences for all the other stocks. "Acts" thus constitute the fourth of the four stocks (his anger/tension; his sense of male privilege; her compliant behaviors and his resultant sense of control; and now the actual acts of violence) in our initial basic model of "his" dynamics and behaviors.

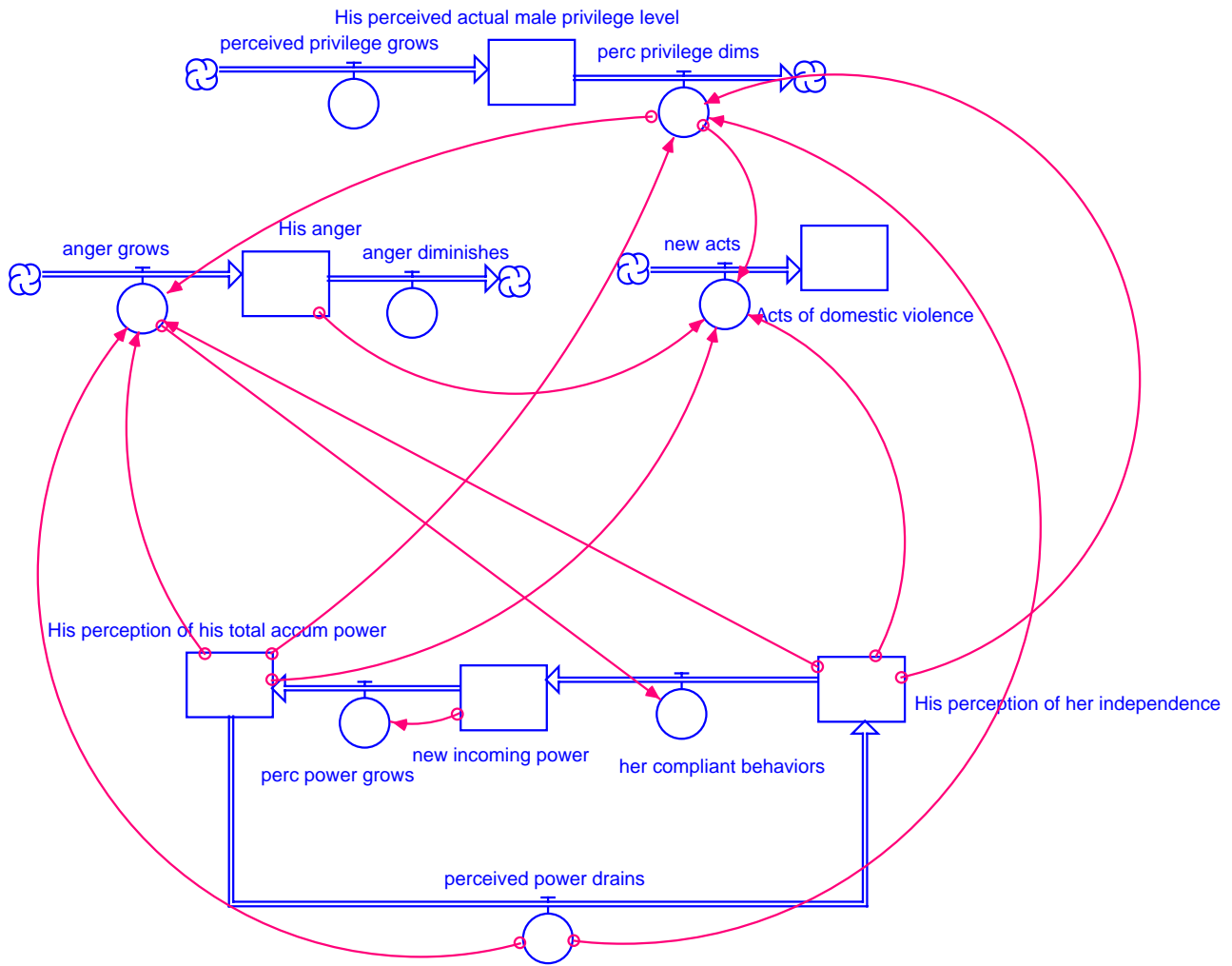
Illustration #6: Acts of domestic violence



We also began to realize that his perception of disparity between his desires and his perceived needs for control and privilege were important factors to consider. We left room in all the sectors for representing the influence of his perception of "gaps" between his needs or perceived expectations and his perceived realities. Such gaps appear to be critically important in driving his behaviors. We have identified and begun to develop two such gaps, in his level of control over her and in his perceived level of entitlement.

But first, on the next page is a picture of the model we had then built. Our current model, however, has evolved significantly from this starting point.

Illustration #7: Original Skeleton Model



One of the most exciting things about working with system dynamics modeling is that you MUST clearly articulate the assumptions you are making about the behaviors and other factors influencing the dynamic portions of the model. As we studied this model, as a group of academics teamed with people working directly with victims and batterers, we challenged and drew from each other a new set of discoveries and clarity of understanding.

First, we realized that he may in fact NOT report feeling any anger at all, but may still engage in repeated violence. We also realized that his *sense* of “entitlement” is more important in the dynamics of these relationships than his “actual privilege level.” Furthermore, we realized that it is the “fear and intimidation” that he instills in her that can influence in her a sense of “remembered fear,” which then can destabilize the relationship enough for her to continue to try to comply with his wishes. This “fear” in her is apparently much more potent than any anger of his in the important dynamics of the relationship.

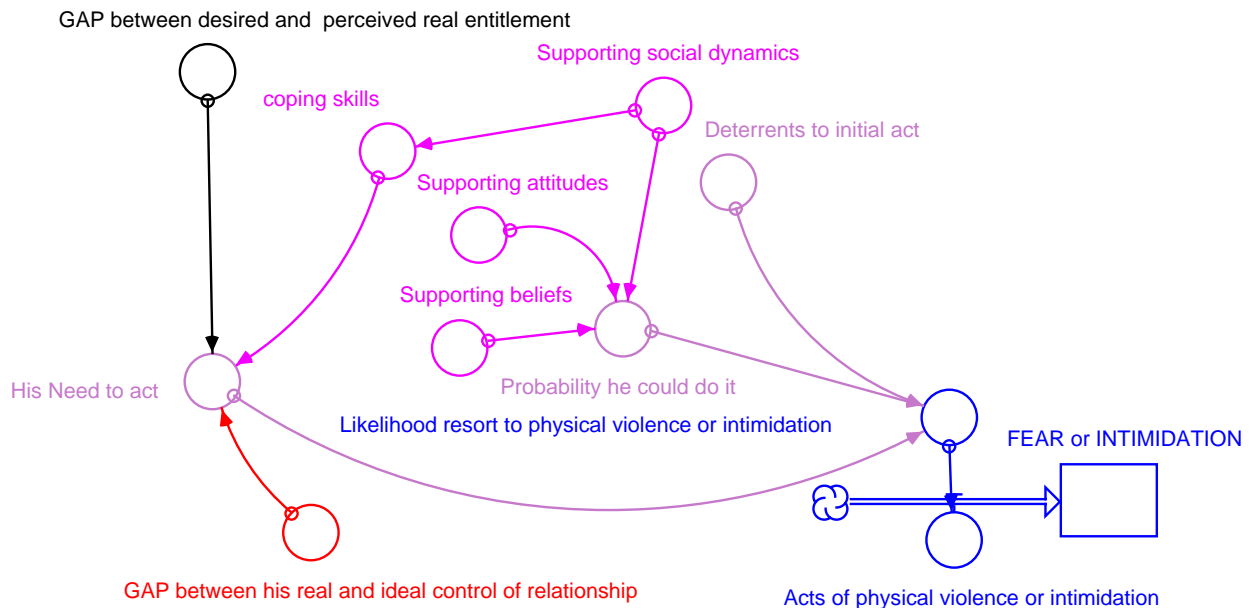
The Logic of our Present Model

Thus far, we have tried to communicate how and where conversations between an academically-trained criminologist, two system dynamicists, and several professionals active in the area of domestic violence have yielded fascinating new insights into the dynamics of domestic violence. At this point, we would like to share our collaboratively built model, first, by presenting key pieces, then by using the model in its entirety to generate some “better questions.”

At the simplest level of analysis, our belief at this point is that there are three major factors which influence the probability of physical violence (see illustration #8). These are:

- 1) A relatively static “profile” or what we call a “probability he could do it. This profile is largely defined by three components:
 - a) Supporting beliefs he holds
 - b) Supporting attitudes held in his culture
 - c) Social dynamics between members of the couple

Illustration #8: Three Factors Leading to a Predisposition to Physical Intimidation



This static profile, however, combines with several DYNAMIC elements. These are:

- 2) “GAPS” or disparities between his ideal or desired world and his perceived world. These, we suggest, generate an internal “need to act.” At its base, what are the factors that shape this need? Consider:

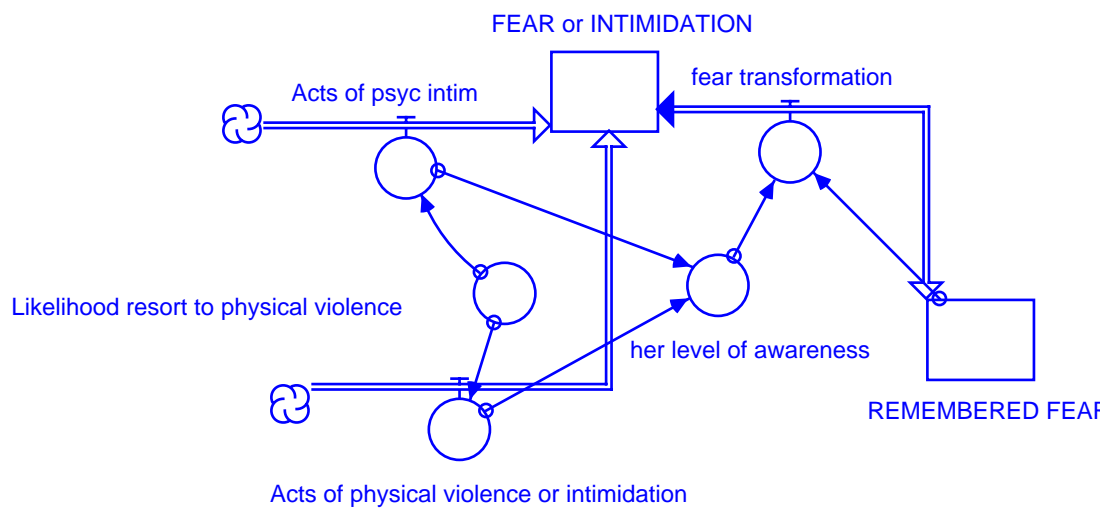
- a) in terms of his relationship, the “GAP between his real and ideal control”
- b) in terms of his outside “world,” the “GAP between desired and perceived real entitlement.
- c) and, as a moderating or, alternately, accelerating component, his “coping skills” or personal characteristics which allow him to deal with obstacles and frustration in non-violent ways.

Yet, even when the profile AND the need exist, we must consider another factor:

- 3) The degree to which there are “Deterrents or costs of an initial act.” Evidence here suggests that his “actual entitlement level” may be related to how effective socially generated deterrents may be.

Also, her level of “FEAR or INTIMIDATION” is critical to the equation as well, in that high levels of fear generally lead her to comply with his desire for control in the relationship. After she has been subject to psychological and/or physical violence or abuse, she retains a memory or a “Remembered Fear” (See Illustration #9). This memory may be revived after an act of violence or intimidation, perhaps a small act of psychological intimidation, which triggers remembered fear to “flow” into current fear. This fear, in turn, may lead her to comply BEFORE an (or another) act of physical violence occurs.

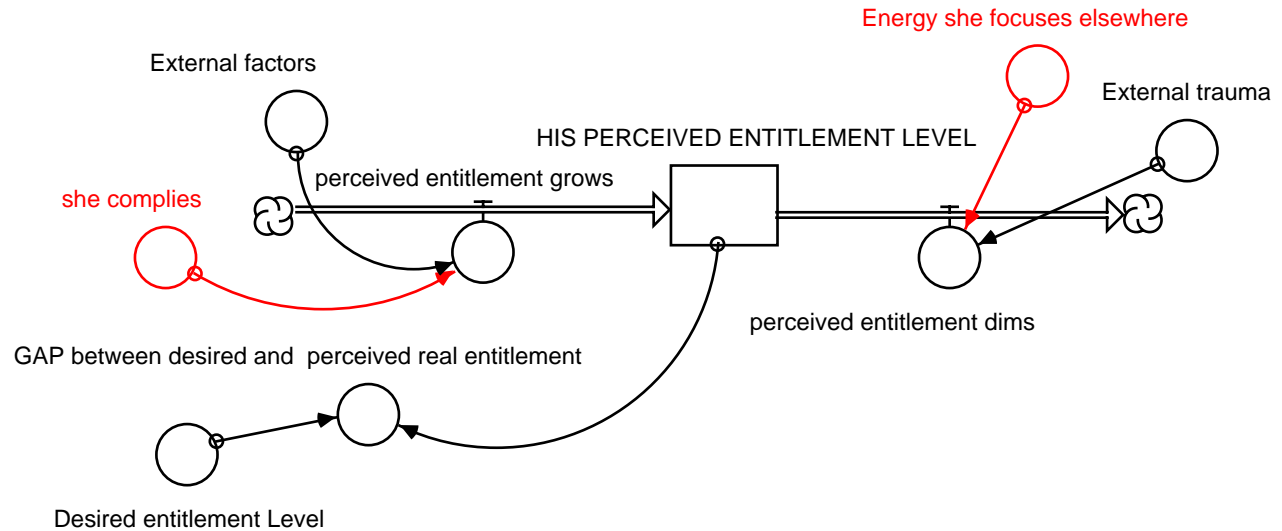
Illustration #9: How Fear and Intimidation Affect the System



Having presented this, we need to recognize that we now believe the “key” to domestic violence, both in terms of what provokes an initial act AND what generates the likelihood of further, often accelerating acts, are the TWO DYNAMIC elements (or stocks, in the jargon of system dynamics), which we call “his perceived entitlement level” and “his perception of his control of the relationship.” First take a closer look at the dynamics of his control.

We have not, as the illustration suggests, fully fleshed out all of the key elements that contribute both to the growth and to the reduction in his overall perceived entitlement level. Still, we believe that both the relationship AND external factors affect this level.

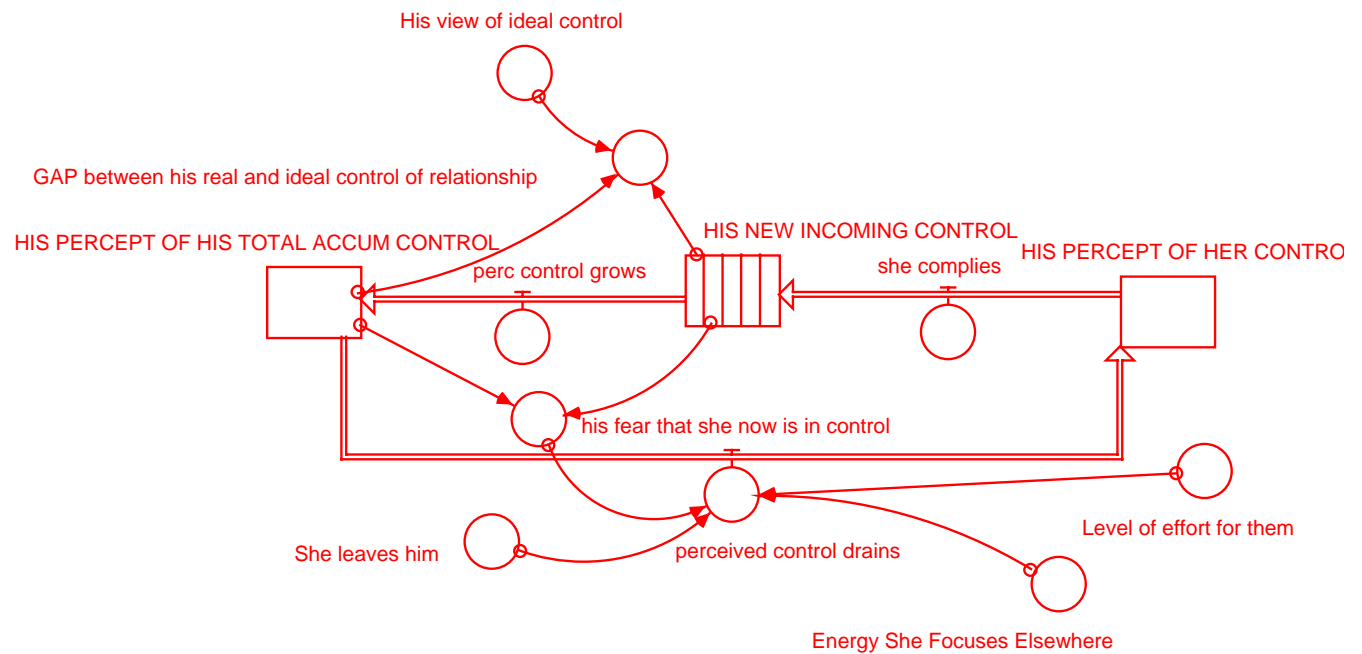
Illustration #10: A Skeletal Consideration of the Dynamics Associated with "His perceived entitlement level"



We have worked harder to date to develop the dynamics of the element of “control” within the relationship and are confident the resultant structure reflects accurate dynamics of change (See Illustration #11).

Here, when she complies with his wishes, he gains a moving, dynamic sense of new, incoming control over her. This control grows over time and accumulates. He is constantly comparing this perceived sense of control with his view of how much he should have, and mentally checking whether there is a gap between what he thinks he should have, and what he actually has. The key here, though, is that he does not appear to be satisfied when he even achieves 100% control over her. When she is TOTALLY compliant, he may begin to fear that she is now controlling HIM! Thus, his sense of perceived control can drain even in the face of, or perhaps due to, total compliance on her part. Other factors influencing his sense that his control is draining would include when she focuses her energies outside the relationship, when she begins to lose interest in compliance, when she leaves him. This influences, again, his perception of her control, which will lead him often to engage in fear tactics again, to get her to begin complying with his wishes. When she leaves is also the time that he is most likely to escalate the violence itself.

Illustration #11: The Dynamics of His Perception of the Distribution of Control in the Relationship



OUR REVISED CURRENT MODEL

Finally, look at the “whole” model as it currently stands. Notice the three major “strands” of the system:

- 1) His perception of or dynamics of control in the relationship
- 2) His perceived entitlement level
- 3) His ability to inflict FEAR and INTIMIDATION

The power of this model, even in its unfinished form, is that it allows us to “walk through” a variety of scenarios and contemplate likely feedback:

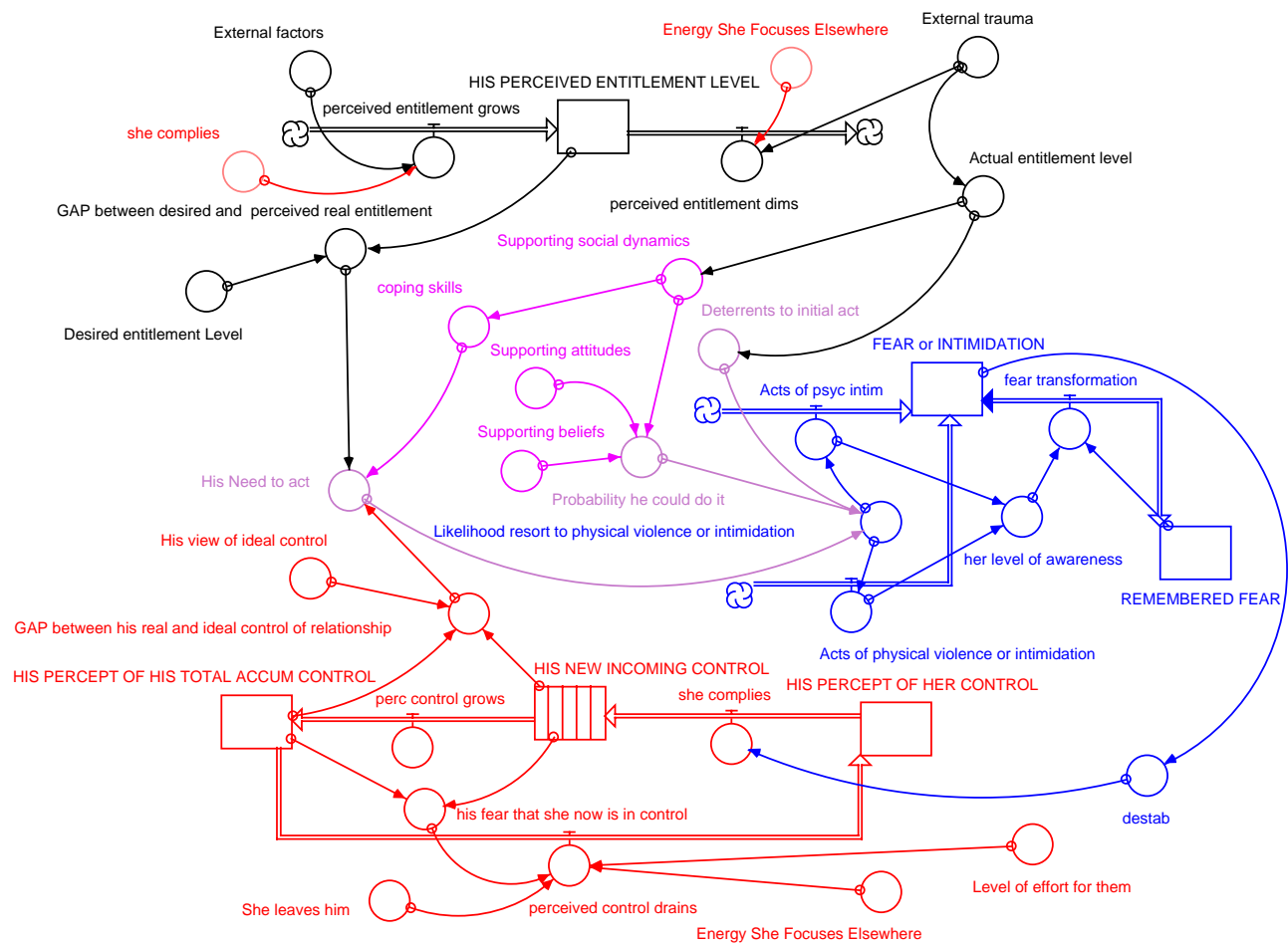
- 1) His need to act can EITHER be set off by circumstances within OR outside the relationship, either having to do with a perceived lack of control within the relationship OR problems outside the relationship.
- 2) That need, initially, can be moderated by coping skills or deterrents;

HOWEVER:

When he engages in his FIRST act of domestic violence, he actually achieves his desire to REDUCE the “gaps” in his life (His action leads her to comply, which in turn boosts his control over the relationship AND his perceived entitlement. In effect, then, the physical act achieves its

desired goals, and the “gaps” between his ideals and reality diminish. However, over time, it is probable that the factors within the relationship and/or within his perceived entitlement level will act to INCREASE the “gap(s)” anew. AND, since the initial deterrent may continue to diminish after each “successful” act, the combination of dynamics can lead to violence at ever accelerating rates. In systems terms, we speak of two archetypes which encompass the dynamics here: (1) the first is “addiction,” which action begets an increasing dependence on subsequent (and accelerating rates of) action; and (2) the second, the “fix that fails,” where the misguided desire to address “gaps” fails to address the fundamental cause(s) of the problems.

Current Model (completed only at present as a diagram)



Conclusion

So, where does all this leave us? We would like to ask for your help. System dynamics models cannot be built in a vacuum. They benefit tremendously in their explanatory and pedagogic power when they have input from any number of experts. We have posted this latest version of our dynamic model on the Trinity College of Vermont website and we seek your input.