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**If “Journeys” and “Things” Frame Our Thinking,
Can We Adequately Reason About The Nature of Conflict?**

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Abstract

Like virtually all discourse, the professional literature on conflict resolution depends heavily on metaphor to explain its central concern: What is conflict and how may it be resolved? Readers are conscious of explicit distinctions, evaluations, and logic, but unconscious metaphors frame thinking, structure assumptions and inferences, and guide reasoning. Are these metaphors adequate, robust, and creative enough to describe and explain our highly specialized knowledge of the complexities of conflict and how to resolve it? This study uses cognitive linguistics methodology to identify metaphors and unpack their mappings in a sizable corpus of mainstream expert literature on mediation and in a small corpus of dynamical systems literature on conflict. In both, two highly conventional conceptual metaphors are found to dominate: conflict metaphorically understood as a journey, including paths, movement, and force dynamics, and conflict metaphorically understood as a material substance or physical object. Building construction, war/struggle and personification-animation metaphors are frequently used and several others are occasionally used; novel or unusual metaphors are rare. Overwhelmingly the same conceptual metaphors are used in the literature studied here as are commonly found elsewhere in a wide variety of discourse types. Yet certain innovative elaborations and extensions that explicate the complexities that conflict scholars have labored over for decades were found in the dynamical systems corpus. Their value in helping us comprehend and teach the nature of conflict and suggestions for their conscious elaboration are discussed.

Metaphors do enormously useful work. They support our understanding when literal statements are not adequate. Lakoff and Johnson (1999) claim that conventional metaphors are inevitable and ubiquitous in order to overcome the impoverished state of literal language on most subjects. We may demonstrate this latter point for ourselves by considering how conflict scholars define “conflict:” It is mutual incompatibility of goals, intentions, interests, opinions, values, claims, beliefs, or actions; any of these are “incompatible” when they prevent, obstruct or interfere with each other (Bar-Tal, Kruglanski, & Klar 1989; Mitchell 1981; Deutsch 1973; Pruitt, Rubin & Kim 1994; Stephan & Stephan 1996; Worchel, Cooper & Goethals 1991).

“Literal language” involves using terms that, though perhaps at a different level of abstraction, come from the same conceptual domain. For example, two people conversing might talk loudly, interrupt, even throw things at each other; we may frame the conversation as an “argument.” An argument is a kind of conversation and, while summarizing qualities of the conversation and adding connotation, this frame takes the form of a literal proposition or qualification using a superordinate concept closely related to, and in the same conceptual domain as, “conversation”; it is heuristically weak.

Contrast this with someone saying that “points were scored.” We now have the discussion metaphorically framed by a qualitatively different conceptual domain that most people know about – a game. This frame is strong because it brings with it potentially more concrete, well-formed ideas integrated with experience of teams, winning and losing, rules, turn-taking, rematches and so forth that are instantly available to structure our understanding and prompt our inferential reasoning.

People reason about something based on their subjective experience of it which, in turn, is understood largely through unconscious, metaphorical interpretation (Lakoff & Johnson 1999, Kövecses 2002). The logic, assumptions, inferences, as well as the content of metaphor source domains (such as Game, above) are projected onto what is being focused upon (a conversation), filling in gaps in understanding and influencing interpretation.

Since the scholarly definition of “conflict” given above uses terms that are largely from the same conceptual domain, someone who has not read widely about or experienced the cases of conflict to which the scholars are implicitly referring will find only weak framing and is likely to have difficulty interpreting what is being talked about. Metaphoric language is inevitably deployed to help provide clearer framing that can guide interpretation. Reviews of the conflict resolution literature have noted the importance of how disputants think about their conflict (Coleman 2004; Gelfand & McCusker 2001). Likewise it can be argued that the theories, research, teaching, and

practice of professional conflict managers, negotiators and mediators will also be based on how they think about what conflict is (Smith 2005). We fully expect such metaphors to be found in the expert, professional literature on conflict (Cohen 2003, Haynes 1999, Wilmot and Hocker 2001).

But finding evidence of such metaphors is only the first step. Do the metaphors used in the expert literature on conflict in fact do the work needed and that they are capable of? Do they properly build upon and overcome the deficiencies of literal statements? Are the metaphors used robust enough to enable clear and flexible reasoning? In particular, for those without practical experience nor exposure to extensive case examples, will the metaphors consciously and unconsciously chosen by the experts provide what is necessary to form an adequate understanding of what conflict is, allowing them to think about it, comprehend and ponder it across contexts and situations?

If, for example, we find in the literature that disputants are *seeking* redress, *moving through steps* and *stages*, surmounting *impasses*, ending their conflict only when they *arrive* at agreements, this would seem to say (note the italicized words) that conflict and its resolution are metaphorically understood as some kind of a journey. As a metaphoric vehicle, however, does the source domain of “Journey” (or other such metaphors that we may find) adequately support our understanding of the complexities of conflict?

To take account of reality in greater detail and sophistication, even at the level of unconscious mental structures that frame basic assumptions, we would expect that decades of in-depth investigations and scientific study of conflict might well introduce more complex and perhaps novel conceptual metaphors. Thus we should expect that mediation experts, while relying in part on the conventional metaphoric expressions and source domains of everyday usage, would employ a more comprehensive and robust set of metaphors. These may include elaborated, extended and somewhat innovative use of conventional metaphors. The result would be better description and explanation of the actual reality of conflict.

We look here at how theoretical and practical discussions of conflict actually unfold in a selected body of expert literature, comparing two subsets of the literature where one purports to account more fully for the dynamical, highly complex nature of conflict while the other mostly does not.

Method

I use research methodology and interpretive guidance from contemporary metaphor theory (Lakoff 1993), along with linguistics and cognitive psychology both pro and con (Cameron 2003; Charteris-Black 2004; Eubanks 2000).

The first corpus of 362,000 words in a computer text file consists of the writings of diverse but mainstream mediation professionals (citation list location given below). First it was necessary to locate where “conflict” is discussed in this corpus, and to do this all instances of the words “conflict,” “dispute,” and the antonym “agreement” were found using concordance software. This software assisted in forming extracts consisting of the sentence containing one or more of these words (in some cases run-on sentences were shortened to pertinent clauses; in a few cases of very cryptic sentences, adjacent clauses were included). This produced a total of 262 extracts totaling 8,118 words.

Next it was necessary to find words used metaphorically in the extracts. Much work has been done by cognitive linguists to establish methodologically sound and theoretically relevant metaphor identification procedures (Cameron 2003; Charteris-Black 2004; Pragglejaz Group 2007). The method used here abides by documented successes from this literature and consists of the following steps:¹

(1) An entire extract was read for its overall meaning. Here is an example:

“At the *extreme* we *see* the all too frequent practice of dispute resolution through *arm-twisting*, in which people are *pressured* to agree through relatively *coercive* means.”

(2) The author manually identified figuratively used words or groups of words (indicated here with italics), the strictly literal meaning of which is incongruous or outside of the given context of conflict and dispute resolution; such figurative words are usually less vague, less abstract, more concrete or physical.

¹ The methodology for detecting and verifying conventional, usually unnoticed, metaphors in textual discourse depends upon judgment and, as such, is prone to coding errors. Researchers are advised to use multiple coders and to calculate inter-coder reliability statistics to verify reasonable agreement as to what constitutes evidence of metaphor (e.g., Cameron...). In this study only one coder (the author) coded the metaphors on the assumption that, even if coding were incorrect a certain percentage of the time, the findings are not likely to be markedly different.

(3) These were manually reviewed by the author, someone very familiar with various figures of speech, to see if in fact each was a metaphor, some other figure of speech, or actually literal usage. Words judged metaphoric were highlighted, the corresponding conceptual metaphors named (small caps are used to name metaphors), and particular sub-domain mappings noted. Continuing the example:

“At the *extreme* we *see*“

CONFLICT RESOLUTION IS A JOURNEY; THIS CONFLICT RESOLUTION IS A VISIBLE PATH.

“through *arm-twisting*”

CONFLICT IS MOVEMENT; THIS CONFLICT IS STOPPED MOVEMENT OVERCOME BY TWISTING MOTION.

“people are *pressured*”

CONFLICT RESOLUTION IS STRUGGLE/WAR.

“*coercive* means”

CONFLICT RESOLUTION IS STRUGGLE/WAR.

Any word within an extract was identified as no more than one metaphor; if two or more metaphors were suggested the predominant one was chosen. Extracts containing more than one metaphor were noted so that combinations of different metaphors used together could also be identified.

To look for different and possibly more expanded and comprehensive metaphors a separate exploratory analysis was done based on the literature of a currently small group of scholars attempting to approach the understanding of conflict differently. This is the discourse of researchers currently investigating conflict from a dynamical systems perspective. It is different from that in the first corpus because it depicts conflict as emerging over time from multifaceted, self-organizing social psychological processes and purportedly accounts for more intricacy, variation, and hitherto unexplained and unpredicted developments. Does the discourse from this work contain different conceptual metaphors?

This second, much smaller, corpus consists of 17,050 words taken from articles on dynamical systems analysis of conflict. This corpus was only for the purpose of initial exploration and a preliminary look for evidence of different or expanded metaphors, so only those extracts containing the word “conflict” were processed and these were analyzed in the same manner as for the first corpus; 95 such extracts were found totaling 2,284 words.

All corpus sources are published and available; they consist of a total of 50 separate articles and chapters and are listed electronically.²

Having described the method, but before describing the results, let us review what findings we are looking for:

1. We expect that conventional metaphors will be numerous and widespread in this literature, and that at least some of the metaphors will show evidence of being conceptual in nature – that is, that they operate in the authors’ thinking.
2. We further expect the possibility of finding metaphors – either sub-domain mappings of conventional metaphors or novel, creative metaphors – that are particularly well suited to describing and explaining conflict, and in explaining advances in the understanding of conflict.
3. With regard to the second corpus (discourse from the systems literature), does it contain different conceptual metaphors that seem better able to describe and explain conflict, in particular as represented by dynamical systems theory? Will we find a more comprehensive and robust set of metaphors (that may include non-conventional or novel metaphors, or elaborated, extended and somewhat novel use of conventional metaphors) than found in the first corpus?

Let us also summarize what is meant by a “conceptual” metaphor. A single use of a particular metaphor or even several uses in a large corpus of text certainly does not verify that a metaphor is conceptual, that is, that an author or community of authors actually thinks or reasons about the domain in question (conflict) with dependence on the frame this metaphor provides. Neither does frequent use of one or two particular metaphoric words. To make such an inference we must find recurrent use of numerous, different words all belonging to a variety of sub-domains of the same metaphoric source domain, illustrating that the attributes and reasoning implicit in the metaphor are actually projected to our domain of interest, namely, “conflict.” As detailed below, this study obtained such findings for some but not all metaphors found, supporting the argument that conflict resolution experts speak and think metaphorically about conflict. We shall see also that very particular metaphors seem to frame this thinking.

² See <http://metaclara.com/bibliography.htm#Mediation%20Corpus%20Text%20Citations>.

Results

Overall one in every 10 to 12 words was found to be in some way metaphoric (see corpus statistics in Table 1 on page 11), substantiating for this literature, as in widespread analysis of others, that metaphor is ubiquitous.

First Corpus

In the first corpus five broad metaphor source domains were found to be used multiple times, plus an “other” category. Sixty-six percent of all metaphors found in this corpus are grouped into those relating to Journey (including starting point, path, destination, movement, seeing where to go, and territory) and Object (including containers and material substances). It can therefore be said that metaphoric conceptual structures used in this conflict literature derive in large part from commonalities in the subjective human experience of movement and object manipulation. The metaphors of Struggle/War, Building Construction, and Personification-Animation together accounted for 22.1%, and the “other” category 11.7%. Table 1 (found in the next subsection on page 11) shows totals for six groupings of metaphors in both the first corpus (described in more detail below) and the second corpus (described in the next subsection).

First let us review the two most important metaphor domains found – those of Journey and Material Object, examples for each of which are included below:

CONFLICT IS A JOURNEY (40.9%). Some of the major sub-domain mappings found in the first corpus that project various aspects of the notion of “journey” to describe and explain conflict are as follows, accompanied by examples:

CONFLICT IS MOVEMENT including Propulsion: “conflict *propels* them into self-absorption and self-centeredness”; Balance: “to affect those *imbalances*”; Physical Force: “conflict has this *power* to affect our experience”; Moving From One Place to Another: “*Approaching* agreement *through* discussion.”

CONFLICT IS TERRITORY: “viewing a conflict as a *field* full of opportunities.”

CONFLICT IS SEEING WHERE TO GO (Difficulties or Features of Vision): “a leader's primary task is to provide a positive *outlook* - meaning the *illusion* of progress - so that the reality can *follow*.”

CONFLICT IS START OF JOURNEY; MEDIATION IS PATH; AGREEMENT IS DESTINATION: “The initial *goals* of the process,” “When an agreement is *reached* through the mediation

process,” “in order to *arrive at* a fair and lasting agreement,” “Regardless of the *approach*, it is the mediator's duty to assess the capacity of each party to *move through* the various *stages*.”

CONFLICT IS AN IMPASSE ON A JOURNEY: “*stuck* in destructive debate,” “The best way to *avoid this pitfall* is....”

CONFLICT IS JOURNEY OF EXPLORATION: “the parties might *seek* to include terms.”

CONFLICT RESOLUTION IS GUIDED JOURNEY: “general principles that will *guide* the... final settlement.”

CONFLICT RESOLUTION IS MAPPED VOYAGE: “we can create a *map* of conflict that can *guide us through* the conflict process.”

The quantity and diversity in sub-domains of the Journey metaphors found confirms the notion that this schema is a cognitive, not simply a linguistic pattern, showing it to be a conceptual metaphor. However we do not note especially elaborated, extended, or novel use of this metaphor, and find instead at least one clichéd and repeated use of ostensibly metaphoric terminology: “reaching agreement” accounted for 17 of the 276 times a Journey metaphor was used.

CONFLICT IS A MANIPULABLE, CONTAINED, MATERIAL OBJECT WITH SHAPE, FORM, HARDNESS (25.2%). Some of the major sub domains or mappings found in the first corpus that project various aspects of the notion of “object” in describing and explaining conflict are as follows, accompanied by examples found:

CONFLICT IS MANIPULABLE OBJECT: “to *fashion* a workable parenting agreement.”

CONFLICT IS CONTAINER (OF OBJECTS) WITH DEFINED BOUNDARIES, DOORS, DEPTH: “help people *in* conflict,” “Disputants often *enter* negotiations,” “*opening* statements,” “achieve *closure*,” “moving the parties closer together and *into* resolution,” “The hurt is so *deep*,” “mental or spiritual struggle *within* a person,” “movement *out of* their conflict.”

CONFLICT IS OBJECTS WITH COMPONENT PARTS THAT ARE NATURAL, SEPARABLE: “understanding of its *nature*,” “*component* of conflict.”

CONFLICT IS OBJECTS IN MULTIDIMENSIONAL SPACE: “in conflict, particularly *along* the emotional or cognitive *dimensions*.”

AGREEMENT IS MANUFACTURED PRODUCT: “they have had significant *input and control*,” “Not all plans are equally *durable*.”

Again we find a large percentage of metaphors are of this type, and there is diversity in the sub-domain mappings, supporting the judgment that the Material Objects metaphor is conceptual. And again we do not note especially elaborated, extended, or novel use of this metaphor.

Other metaphor source domains of smaller yet important representation were found in the first corpus, in particular those of Struggle/War, Building Construction, and Personification.

CONFLICT IS STRUGGLE/WAR: (7.4%) The lexical evidence of this metaphor strongly suggests that it is in many ways an elaboration of CONFLICT IS MOVEMENT, but this category of movement involves high degrees of force, violence, and more extreme goals or intentions: “identify those people who could *sabotage* the parties' agreement,” “*coerce* the other party into agreement or *submission*,” “*force the parties* to confront their case as well as that of the *opponent*,” “things that he or she will *concede* and those things he or she will *secure*,” “verbal *attacks*,” “*position* taken,” “*destructive* aspects of conflict (for example, *violence*, escalating *hatred*, and distrust), this *strategy* seldom makes a conflict worse,” “move people away from their *embattled* stance,” “*win-lose struggles*,” “conflict is... an *encounter* with *arms*, a *fight*, a *battle*, a *prolonged struggle*,” “the *clashing... of opposed* principles.”

War terminology of the kind found here is indeed habitual when discussing conflict of all sorts, but this does not automatically mean it is conceptual. This observation, the note above about War perhaps being an extension of the Movement metaphor, the relatively low rate of use of War in this corpus, and the limited diversity in sub-domains found here, all suggest that this is not a distinct conceptual metaphor for this community of experts.

CONFLICT IS BUILDING CONSTRUCTION: Although only accounting for 7.9% of all metaphors found in the large corpus, this metaphor is widely found in general discourse and has many compatibilities and common entailments with other metaphors found more frequently here, particularly as it elaborates configurations and organization of Objects:

CONFLICT IS STRUCTURE: “more *constructive* discussions,” “*destructive* debate,” “*constructive* confrontation,” “*destructive* and *divisive*.”

CONFLICT IS STRUCTURE WITH (NON-)SOLID FOUNDATION: “*undermine* their confidence” “the *underlying* interests,” “in conflict in order to *solidify* a sense of community.”

CONFLICT RESOLUTION IS PARTS ATTACHED/INTEGRATED/MODULARLY-BUILT: “*integrate* mediation and therapeutic strategies,” “to protect their community against the forces of *disintegration*,” “the *building-block* approach.”

CONFLICT IS STRUCTURE WITH MULTI-DIMENSIONAL, MULTI-LEVEL FRAMEWORK: “The hope is that a new cognitive *framework* will result,” “the *formation* of coalitions,” “emotional, cognitive, or behavioral *dimensions* of conflict,” “the successive *reframing* of the conflict,” “attempt to *recast* the way in which the conflict is presented” “think of conflict on many different *levels*.”

CONFLICT IS FAÇADE: “to understand what *lies behind* a conflict.”

CONFLICT IS SPECIFIED/DEFINED STRUCTURE: “identify *criteria* or objective *standards* that could be used,” “if the mediator lacks *structure* and is insufficiently *organized*,” “identify a bargaining *formula* or set of general *principles*.”

The overall incidence for Building Construction is not large, and Construction terminology is often collocated with Material Object terms, but there is diversity of sub-domain mapping (e.g., the notion of dimensions and levels of a construction is projected as levels of conflict) that persistently suggests that this is a distinct cognitive domain for conflict resolution experts. Foundation, defined part-whole structure and framework notions seem typical and do not represent unusual extensions or elaborations of this metaphor domain; however the sub-domain of “façade” does seem somewhat unique.

CONFLICT IS PERSON/ANIMATED BEING (6.8%): “until a conflict or issue has *matured*,” “the *creation* of cognitive dissonance,” “the *nature* of conflict and the potential for *growth*,” “gaining the energy, lessons, and growth that a conflict *has to offer*,” “conflict has its own *life cycle*,” “the parties' true conflict... experiencing the resulting *pain*.”

We frequently ascribe “person” status to things and events in conventional conversation, and numerous examples of this were found. In this corpus there is not sufficient frequency or diversity of such usage, however, to conclude that these experts ascribe a full range of animated or person characteristics to the notion of conflict; nor are there any unusual extensions or elaborations.

Those remaining metaphors found present are those with small frequency (each under 2%) and are categorized as “Other”: Game/Sport, Legal Contract, Illness, Theater, Plant/Agriculture, Accounting/Economics, Weather, Radio, Instrument, Ship, Dancing, Injury etc., which together account for another 11.7%. These potentially comprise a more comprehensive and robust set of metaphors that could be elaborated and extended for use in describing and explaining conflict. However, their low frequency and diversity of use by conflict resolution experts represented in the first corpus does not allow us to conclude that they play any part in those experts' thinking.

Second Corpus

In the second corpus the same five metaphor source domains were found plus “Other” which included “Complex Machines.” Percentages similar to the first corpus were found: 60% in the Journey and Object source domains; Struggle/War, Building Construction, and Personification accounted in this smaller corpus for 24.1% and 15.9% in “other.”

Table 1 shows a breakdown into six metaphor categories compared between the first and second corpus. The frequencies of the categories are highly correlated (Kendall's coefficient of concordance = 0.94 and the average Spearman rank correlation = 0.89; the rank order is the same for both corpora, with the exception of War and Personification categories; this high correlation and lack of difference between the metaphors of the two corpora is reflected in a Chi Square of 9.43, not statistically significant [$p=.09$, although such probability estimates are uncertain]). We must conclude that there are no statistically significant differences between the broad metaphor groupings found in the second corpus compared to the first.

So, while the metaphor domains represented are almost identical and percentages in each are very similar, we will want to look more closely to detect any interesting or suggestive differences.

<i>Corpus Statistics</i>	<i>First Corpus</i>		<i>Second Corpus</i>	
	<u>Quantity</u>	<u>%</u>	<u>Quantity</u>	<u>%</u>
Total words in extracted segments	8,118	2.2	2,884	16.9
Total metaphoric words or word combinations	674	8.3	289	10.0
Extracts with no metaphor	9	1.3	1	0.4
<i>Metaphor Statistics</i>				
Journey Metaphor Subtotal start, path, destination, obstacles, movement, territory, see where to go	276	*40.9	134	*46.4
Object Metaphor Subtotal material substance, container	170	*25.2	39	*13.5
Building Construction	53	*7.9	29	*10.0
Struggle/War	50	7.4	14	4.8
Personification/Animated Being	46	6.8	27	*9.3
Other Metaphors including Complex Machine, Game, Legal Contract, Illness, Plant/Procreation, Economic/ Accounting, etc.	79	11.7	46	15.9
Totals	674	100.0	289	100.0

Table 1 – Corpus and Metaphor Statistics

* Evidence sufficient to be judged a conceptual metaphor (see text).

When comparing the Journey and Material Object metaphors found in the second corpus with the same metaphors found in the first, certain differences are noted below.

The CONFLICT IS A JOURNEY (46.4%) metaphors in the second corpus, as with the first, contain various sub-domains:

CONFLICT IS MOVEMENT, but we find some evidence that entailments are more unpacked and disaggregated:

CONFLICT IS FORCEFUL MOVEMENT: “as the *forces* promoting conflict grow” (also “launch,” “dragging” under object; “crossed threshold.”)

CONFLICT IS PATTERNED MOVEMENT: “However, every conflict system... will evidence general patterns of *interactions between* the parties,” “instrumental in *bringing together* the mechanisms necessary to generate and maintain,” “conflict *escalates* to uncontrolled (and often unwanted) *levels*.”

CONFLICT IS LIMITS TO MOVEMENT: “in conflict, the *constraining* influence of our moral *guides* diminishes or becomes *reversed*.”

CONFLICT IS TERRITORY: “development of an *underground* opposition movement,” “the system will evolve *toward* a coherent but negative *state*.”

CONFLICT IS SEEING WHERE TO GO: “to *illustrate* some of the dynamical strategies,” “From a dynamical *point of view*,” “From the dynamical *perspective*,” “to *see* how these factors impact.”

CONFLICT IS OBSTRUCTED TRAVEL (resembling CONFLICT IS AN IMPASSE ON A JOURNEY in first corpus): “many of the constructive *forces and connections* which are inherent to any social system... become... *obstructed*,” “*block* the positive feedback loops that maintain the conflict.”

CONFLICT IS START OF JOURNEY: “The *first step in approaching* a case.” Note that (perhaps because the second corpus does not discuss mediation or conflict resolution in the same vein as the first) the MEDIATION IS PATH metaphors are not represented.

Instead we find CONFLICT IS TRAVEL TO IDENTIFIABLE POINTS and AGREEMENT IS DESTINATION: “Once conflict has *reached*...,” “a series of negative encounters with someone *leads to* an explicit expression of conflict,” “latent attractors... pose a risk of a rapid *return* to hostile feelings and actions,” “must *go beyond* agreements and....”

CONFLICT IS TRAVEL ON UP-DOWN PATH: “further *escalating* the conflict.” CONFLICT RESOLUTION IS JOURNEY OF DISCOVERY (resembling CONFLICT RESOLUTION IS GUIDED JOURNEY in the first corpus): “parties might *discover* what factors are most relevant.”

Notions of path, destination, and the guided journey or mapped voyage are not so explicitly found in the second corpus, but this may occur because the second corpus is so much smaller than the first. The second corpus reveals two additional sub-domains (CONFLICT IS VOYAGE OF DISCOVERY and CONFLICT IS TRAVEL ON UP/DOWN PATH). All such extensions were conventional, not novel, yet they suggest greater qualitative nuance in the second corpus.

Overall, the Journey metaphor represents an even larger percentage of metaphors in the second corpus compared to the first, diversity is wide, further confirming that Journey is a conceptual metaphor in this literature.

Regarding CONFLICT IS MATERIAL OBJECT (13.5%) in the second corpus, we find many of the same sub-mappings as in the first corpus:

CONFLICT IS OBJECT MANIPULATION: “conflicts... escalate and deescalate, *change form*, *spread into* new groups, and can *be passed from* generation to generation,” “conflict *between* the Communist regime and the opposition,” “*shape and constrain* the parties' choices,” “conflict *launched*,” “*dragging* the whole system into full-blown conflict,” “In thinking about ethnic conflict, *on the other hand*.)

CONFLICT IS CONTAINER (OF OBJECTS) WITH DEFINED BOUNDARIES, DOORS, DEPTH:

SEVERE CONFLICT IS CONTAINER WITH ENTRANCE: “Once a conflict has crossed its destructive *threshold*.”

CONFLICT IS BEING LOCATED INSIDE OR OUTSIDE: “the *ingroup* and *outgroups* in conflict,” “move the system into the *basin* of this attractor.”

CONFLICT IS DEFINING LINE: “the conflict that had *defined* the political situation.”

CONFLICTS ARE COLLECTIONS OF UNITS: “the various *elements which constitute* the conflict.

CONFLICTS ARE SUBDIVISIBLE, INTERCONNECTED ENTITIES: “the transformation of a unidimensional conflict over power into *a multitude of small* issue-specific conflicts,” “A dynamical system is defined as a *set of inter-connected elements...* that change and evolve in time,” “the general *patterns* of the conflict.”

CONFLICT IS RARE SUBSTANCE WITH [VAPOROUS] ELUSIVE ESSENCE: “The *essence* of the attractor concept and the relevance of attractors for conflict can be *captured* in a simple metaphor.”

CONFLICT IS SOMETHING TO WHICH OTHER THINGS ARE APPLIED: “an effective *application* of the principles of dynamical systems *to* conflict,” “deeply *ingrained*.”

CONFLICT IS UNSHARED THING: “*lack of a shared reality* can contribute to a conflict's intractability.”

In the second corpus, keeping in mind that this smaller corpus is unlikely to produce all of the same metaphors as the first, we nevertheless note that basic object properties are represented again in the sub-domain mappings, such as separability, manipulability, and container attributes, inside/outside, boundaries, and depth. Now, though, the notion of “attractor” is frequently used as the container of conflict (also see CONFLICT IS STRUCTURE, below). Although the Object metaphor was found to be a considerably lower percentage of the total metaphors in the second corpus, its sub-domain diversity is still strong (including the novel additions of “vaporous essence” and “unshared” attributes along with numerous conventional extensions), confirming its conceptual status.

As in the first corpus, other metaphor source domains of smaller yet important representation were found in the second corpus, in particular those of Struggle/War, Building/Construction, Personification, and Complex Machine (the latter only found in the second corpus).

CONFLICT IS STRUGGLE/WAR (4.8%): “slight provocation may result in *full retaliation*,” “taxed, obstructed, or *destroyed*,” “*erupt into violent...*,” “*warring* factions...”

The same conclusion can be drawn about lack of evidence for conceptual metaphor for the Struggle/War metaphor in the second as was done for the first corpus.

CONFLICT IS BUILDING/CONSTRUCTION (10.0%):

CONFLICT IS STRUCTURE:

CONFLICT IS (VERTICAL) CONSTRUCTION/DESTRUCTION: “attractors not only provide a *foundation* for conflict resolution,” “an attractor for *destructive* conflict,” “The factors that promote a *collapse* of complexity,” “*structural* dynamics which *give rise* to enduring, *destructive* conflict.”

CONFLICT IS STRUCTURE WITH (NON-)SOLID FOUNDATION: “its *support* by the former Soviet Union,” “as long as the *underlying structure* of the system remains *stable*,” “factors that *untangle* issues,” “less spectacular *groundwork* that *paved the way* for the transition to occur.”

CONFLICT RESOLUTION IS PARTS ATTACHED/INTEGRATED/MODULARLY-BUILT:

CONFLICT IS CONNECTED PARTS: "in intractable conflicts, these *levels* tend to become *interlinked*," "but because of the *tightly-coupled* nature of multiple elements in the system," "the *constructive* forces and *connections* which are inherent," "variables defining the conflict are strongly *interlinked* by positive feedback loops."

CONFLICT IS STRUCTURED ARRAY OF ENTITIES, MULTI-LEVEL FRAMEWORK: "conflict dynamics are often significantly influenced by the internal dynamics of the *various elements which constitute* the conflict," "conflicts at all *levels*," "a significant change of *frame*."

Despite the size of the second corpus we find a diversity and variety of Building Construction sub-domain mappings that may be due to the second corpus authors' interest in the details of the internal structure and workings of conflict (note inclusion of nicely extended sub-domains of "non-solid foundations" and "vertical construction/destruction" complementing "construction" as found in the first corpus). Again, although a small overall percentage of the metaphors, this domain can be judged conceptual because of the further qualitative distinctions found.

The metaphor of CONFLICT IS PERSONIFICATION/ANIMATION (9.3%) also found in the first corpus (6.8%) are more elaborated in the second corpus, depicting conflict as a person with feelings who can sense different things, become annoyed (perturbed), disequibrated (unbalanced), have impulses, an organism that behaves, grows and develops according to its own nature:

CONFLICT IS EMOTIONAL BEING: "they are... *perturbing* a [conflict] system that has its own, often quite strong dynamics."

CONFLICT IS GROWING PLANT OR ANIMAL: "...conflict *grow*...", "prevent the *development of malignant* ingroup-outgroup conflict," "the system will *evolve* toward a coherent but negative state."

CONFLICT SYSTEM IS BEING WITH SENSATIONS, IMPULSES: "our *internal moral sense typically acts*..."

CONFLICT IS IDIOSYNCRATICALLY RESPONDING BEING: "conflict may *respond*... by 1) completely *resisting*... 2) showing an exaggerated *response*... 3) *evolving* in a completely unpredictable direction... or 4) *responding* in a manner proportional."

CONFLICT IS ILLNESS: “critical for avoiding *malignant* conflict,” “groups are *immune* to any sort of influence.”

CONFLICT IS MAMMALIAN BODY: “This issue goes to the *heart* of certain types of conflict.”

CONFLICT IS NATURAL BEING: “factors that are likely to influence the *nature* of the relationship.”

CONFLICT IS A LIVING AGENT: “conflict launched at one level is likely to *recruit* other levels as well,” “Here we see a preponderance of positive feedback loops... which *fed* the escalatory patterns of the conflict,” “critical factors *dictating* how the groups....”

CONFLICT IS PROCREATIVE: “Conflict... is likely to *spawn*....”

In this smaller corpus we see a larger proportion of Personification metaphors and a quite wide diversity (including its link to Complex Machine metaphors discussed below) that encourages the conclusion that this metaphor is conceptual. It is tempting to infer that the conflict-as-complex-systems literature making up this second corpus, with its emphasis on systems that could have “lives of their own” would stimulate use of this metaphor in more of its varied forms.

The CONFLICT IS A COMPLEX MACHINE metaphors found in the second corpus (3.1% and included in “Other” in Table 1) have been found in other studies of discourse from a variety of genres and shown by Koveces (2002) related to Personification metaphors. In this study they reveal a metaphoric understanding that conflict steers and changes itself over time partly because of its own means of internal communications.

CONFLICT RESOLUTION IS TINKERING WITH COMPLEX MACHINE: “*inducing* change... that has its own, often quite strong *dynamics*.”

CONFLICT IS CYBERNETIC MECHANISM WITH SENSORS AND CONTROLS: “...negative *feedback*...,” “dynamical strategies and *mechanisms*.”

The “Other” category that accounts for 15.9% of the total versus 11.7% in the first corpus – a possible indication of unusual or original metaphors – is illustrated below.

CONFLICT SYSTEM IS THEATER: “*roles*... shape and constrain the parties' choices of strategies and tactics,” “typically *acts* as a source of negative feedback for us,” “may exhibit conciliatory *gestures* when *prompted* to do so.”

CONFLICT IS CONDUIT/CHANNEL (feedback loop): “then activation of a single variable will *feed into* the activation of other variables.” Combining structure with feedback loops: “The *structure* of conflict is thus maintained not only by positive *feedback loops* among features at a given *level*, but also by positive *feedback* between *levels*.” Combined with structure and movement: “sustained primarily by positive *feedback loops* within and across *levels*, we see the *emergence* of strong, stable attractors.” Combined with Journey: “*block* the positive *feedback loops* that maintain the conflict at multiple levels, introduce negative *feedback loops* that *de-escalate* the conflict once it *reaches* a certain threshold,” “A positive *feedback loop*... *leads to* an explicit expression of conflict.”

Each of the following metaphor source domains were found only once (together with Complex Machine totaling 15.9%): Test Passed; Fire/Cooking; Practice/physical exercise; Fashion; Music; Logical formula; Writing; Speaking; Vertical Position (More is Up); Hierarchy; Lock.

The variety of sub domains found for each metaphor supports the claim that metaphoric cognition is allied with metaphoric language for three domains in the first corpus and four in the second.

Discussion

Jones and Hughes (2003) asked what metaphors people use to understand conflict and this study contributes to answering that question as regards mainstream mediation experts. Why is it important that we know the metaphors being used? To the degree that we do have evidence of conceptual metaphor we know the speaker’s conscious and unconscious cognitive structure and we can access it to greater effect than if all we could attend to were literal statements or weak framing. Knowing how the theorists and experts think about conflict, from their extensive experience and research, can enhance development and training in the field of conflict resolution. The findings reported above document the metaphors, and now we review their implications for further research and practice.

Numerous and Widespread Conventional, Conceptual Metaphors

With eight to ten percent of all words in the extracts studied found to be metaphoric this literature, along with so many others, can be said to be decidedly metaphoric. With an average of 86% of all metaphoric language in each corpora falling into five metaphoric groupings, we have identified the particular metaphors that are widely used in this literature when discussing conflict. The findings reveal a conceptual superstructure or framework which normally escapes our notice.

The metaphors found are not dramatic, archetypal or mythological and are more often mundane than vivid. Along with their constituent sub-mappings these metaphors are usually commonplace in our everyday language, but sometimes unusual.

The frequency with which these metaphors are used supports the claim that they are not adornments but are essential to the authors' communications; the variety of sub-domains concentrated into integrated groups corroborates the conceptual nature of three domains (Journey, Material Object, Building Construction) in the first corpus and those same three plus one more (Personification/Animated Being) in the second corpus. The average of 14% that were "other" metaphors include some novel ones, but were so infrequently used that they cannot be said to be conceptual.

To the degree that one accepts a principal tenant of the metaphor theorists – that ability to reason about a topic is largely dependent on the metaphors used to describe and explain it (Lakoff & Johnson 1999) – this finding alone counsels that conflict resolution professionals should pay attention to metaphor.

Metaphors Particularly Well-Suited to Describing and Explaining Conflict

In the broadest sense, conflict experts, when writing about mediation, have not been found in the first corpus to use metaphors differently than those in other disciplines writing about their specialties.³ The metaphors and structures found are common to a variety of discourse in English (each of these metaphor groupings are found, for example, in journalism, political discourse, education, and sacred texts [Charteris-Black 2004, Eubanks 2000, Cameron 2003]) and provide little that is special to help describe or explain the particular intricacies of conflict.

Innovations in Second Corpus Metaphors

This finding made it important to search carefully to see if innovations in the understanding of conflict might begin to bring forth innovations in the metaphors used to describe and explain them. The second corpus was analyzed only to provide a preliminary assessment of possibly more

³ Cameron & Deignan (2006) evaluate the conventionality of metaphors by comparing their instantiations in a particular corpus of interest with instantiations found in very large, representative and general-purpose corpora such as the 59 million-word Bank of English corpus. Such comparisons are less relevant here because of the more specialized claims being made.

comprehensive and robust metaphors where complex, dynamical conflict systems are discussed. The investigation of this newer literature was expected to reveal such innovative application of metaphor.

However, the metaphors found in the second corpus were in the same five main conceptual domains as found in the first corpus. Quantitative analysis found no significant differences between the numbers of metaphors in these groups comparing the first and second corpora. This indicates that, even though the authors in the second corpus are describing conflict to be of a particular form quite different from that of the first corpus, their metaphors are essentially the same.⁴

But some qualitative differences between the first and second corpus were found. These differences in the second corpus, despite its very small size, are evidenced there by the added diversity of metaphoric language for Journey, Material Object, Building Construction and Personification/Animation metaphors, or within four of the five principal metaphor groups. This diversity of language hints at, but does not entirely reach the level of, the novel extensions or elaborations of the metaphors found by Lakoff and Turner (1989) in admired poetry – usage that deepens and enriches implications, promoting a multiplicity of interrelated meanings in combination.

Nevertheless these qualitative findings reply in the affirmative to our query about whether this conflict literature would show innovation in the metaphors it employs to better describe and explain conflict according to dynamical systems theory. The various extensions and elaborations found, although limited, suggest that they were needed or useful in describing and explaining conflict as a dynamical system. For example, the Journey metaphor was more widely used and extended to include guided journey, the Material Object metaphor was correspondingly less often used, yet even there we found extensions of the sub-domains. Building Construction metaphors were extended also to ideas of vertical structures, untangling, and also vaporous essences, non-solid foundations and destruction.

⁴ Quantitative differences between the two corpora would occur if, in the second corpus, some special or more comprehensive set of metaphors existed, and this was not found. Certain qualitative differences however, such as elaboration and extension of common metaphors or wider use of possible sub-mappings, taking greater advantage of the content and logic of the metaphoric source domains, would not be detected by the kind of quantitative analysis done here.

Perhaps most notably the Personification/Animated Being metaphors came to include the mapping of a person with feelings who can sense different things, become annoyed (perturbed), disequibrated (unbalanced), have impulses, an organism that behaves, has illnesses, grows, develops and procreates according to its own nature; this diversity of sub-domains established this metaphor as conceptual. We saw the introduction of Complex Machines having their own strong dynamics that steer themselves over time, evoking mechanical or electronic ideas such as feedback and feedback loops, methods of induction and control mechanisms such as sensors and regulators.

Such elaborations and extensions use everyday terminology to help describe dynamical systems. They are a common sense, if imprecise, way to simplify complex interactions of variables. Dynamical systems formulations are mathematical and intricate and go beyond the current educational prerequisites for mediators of conflict, so elaborated Personification or Animated Being metaphors serve a useful function.

A Tendency for Metaphors to Mislead

As a strong frame, metaphor can serve the conflict resolution experts' purposes to express intended meaning more fully and completely, but it has equal potency to distract from, confuse, oversimplify, or obscure it.

Epistemic Mystification

We may distinguish between the learner, the model used to facilitate learning, and the phenomenal reality being learned about. Metaphorically expressed theory enables sensory representation of abstract ideas, allowing the learner to understand in a more concrete sense: "...the *re-mediation of the abstract into the sensible* for making the theory, process or construed phenomena in question comprehensible by sensory input" (Carstensen, Tibell and Bernhard 2003 p. 1). Metaphors used in a model to facilitate learning may be used and reused in a variety of contexts until one may be unable to distinguish when they are being used literally and when figuratively. While providing the needed simplification and sensory representation as a pedagogical tactic, the learner may confuse the epistemic model (or metaphor) for the ontological reality. The text intended to reveal a theory may end up making it ambiguous and even contribute to forming an appealing but inaccurate ideology or imparting "regimes of truth" (Goatly 2002 p. 266).

Journeys and Things

We can see this by looking again at the two most widely used metaphors found here in these corpora to describe conflict, Journey and Material Object. These metaphors compress and summarize usefully but they promulgate a decidedly materialistic ideology that was unconsciously

chosen, reifying sequences and processes into objects located in time-space where every change is a physical action.

Real objects are things or substances with all of their material attributes, such as hardness or softness, density, slipperiness, and portability. When conflicts are metaphorically understood as objects, all such attributes can be projected to frame one's thinking about conflict. From conventional knowledge we know that objects can be separately sensed and manipulated. This is the source domain of our metaphorical understanding of objects from which we know that objects have stable properties, occupy space, can be separated one from another, handled and manipulated with the right tools, we can observe, classify, count, measure, sort, and order them, move or reshape them to fit together, and choose which ones to use.

The experts talk about objects and figurative journeys through "conflict territory," overcoming "impasses" and "reaching" agreement. This renders an otherwise potentially confusing reality as familiar and coherent. The metaphoric descriptions and explanations of conflict and how it works found in this study can lead to oversimplification because conflict in real life turns out to violate many of these properties, often having parts that are not as the metaphors seem to describe them. Therefore, sensing this inconsistency between metaphoric superstructure and literal meaning, we are deprived of the expected frame of reference, so it shouldn't be surprising that we may become frustrated, confused, and label a conflict as difficult to understand, incoherent, or even unworkable.

"Attractors" in Second Corpus

Taking an example from the second corpus, dynamical systems literature authors propose a theoretical analogy of conflict as an "attractor" which they illustrate with a drawing (Coleman, Vallacher, Nowak & Bue Ngoc 2007 p. 8). This notion is frequently invoked, for example, such that disputants are "pulled into" an attractor. "Attractor," as dynamical systems theorists use the word, would be incongruous if taken literally, so the authors of the second corpus quite correctly identify this as metaphor. But they fail to note how the metaphoric concept can be both helpful in understanding and misleading in its oversimplification. For more inexperienced readers an oversimplified and perhaps misleading understanding may emerge based on such tacit metaphors.

The attractor metaphor implies that the multivariate dynamical conflict process is as simply organized as water running into a basin. The state of a system is understood as an object that is somehow propelled and moving in space according to force mechanics. The naïve reader may assume that this physical movement will proceed in simple, sequential steps, like a journey, with a

starting point, path, and destination. In everyday, conventional thinking this is interpreted in terms of what linguists call "aspectual structure" (Lakoff 1993) with an agent that provides the motive force (gravity or other external forces), an affected entity (the ball), initial, intermediate and ultimate locations connected by a path or trajectory defined by features of a terrain (basin of attractor), etc.

But the experts are supposed to be addressing dynamic, non-deterministic conflict processes. Attractors do not literally attract in the sense of the physical forces that this metaphor projects; in fact "attractors" are abstract locations where a system tends to stabilize over time in a figurative space.

Conceptual Blends

Sophisticated readers, those already very familiar with dynamical systems, may find the notion of attractor useful and appealing because it is a conceptual blend of metaphors rendered in a compressed package (Fauconnier & Turner 2002, Grady, Oakley, & Coulson 1999). The metaphoric aspects recap and portray what is already understood from case analyses modeled as mathematical interrelationships in a multivariate dynamical process. Such systems models show stabilization into certain states over time and can be neatly depicted as balls rolling into depressions. Even for sophisticated readers, however, the ideas of a system reaching stability over time and an object moving over terrain to an intended destination can become confounded. The ball is metaphorically understood as a tangible material object that is being pushed and pulled but is really the instantaneous state of a process, a depression is metaphorically understood as part of a path over terrain but is actually a line tracing those states over time, and the force moving the ball is metaphorically understood as gravity but in reality is the sum of various causes. Already this is a lot to comprehend but the authors in the second corpus introduce other metaphors as well.

Blending of Additional Metaphors May Enrich Understanding or Cause Confusion

Findings reported above showed other qualitative differences between the first and second corpora in the form of increasing diversity of metaphoric words within the same domains and the addition of certain conceptual sub-domain mappings. Cybernetic machine language (including the repetitive use of "dynamic" in various forms) begins to supplant the relatively linear, input-output, means-end or source-path-goal spatial allusions, force-mechanics, and sequential schemas found prevalent in the first corpus. Also Personification-Animation metaphors are more elaborated in the second corpus; these are easily understood and enable people without in-depth experience with difficult conflicts to begin to comprehend how the complex character of conflict can "have a life of its own."

The state of the conflict system (the ball metaphorically understood in the generic Journey metaphor as the affected entity to which force is applied) is itself an object with constituent parts. In the second corpus these are spoken of literally as having their own dynamics and, as we have seen above, collectively they are also understood metaphorically as a kind of animated being with a particular nature, including a sense of balance (that can be disrupted or perturbed), with impulses to do certain things depending on feedback, the capacities to grow, develop, spawn or procreate. These metaphors, in turn, are combined with the metaphor of “positive feedback loop,” something that connects to and evidently controls and steers by directing and regulating the force applied to the affected entity.

The feedback loop metaphor both violates and complements the journey metaphor. The resulting blend evokes an image of a positive and good material substance being fed physically to some entity, as fuel might be fed to a fire through a tube or conduit, keeping it going or making it bigger. The blended metaphor lacks specific detail but suggests that the state of the system is adaptable, multiply determined, perhaps as a living organism evolves in an ecosystem. This is a speculative notion because it is not stated as such in the material comprising the second corpus and there is no account of the manner in which such “feeding” must be done in order to work correctly.

How complete is such metaphoric description? Is it generalizable and does it enable us to logically think through a conflict and reason about it inferentially? It is in doubt whether the several metaphors blended were carefully considered by the authors for their conceptual clarity once combined. It would seem that success in this regard would be possible only with careful construction and explanation of such a blended metaphor; otherwise wrong-headed interpretations are a distinct possibility.

How Might Metaphors Be Used Better?

Once introduced for their initial teaching function the shortcomings of metaphors, however, can be mitigated, even exploited. Sticht (1993) describes how the differences between a metaphor and the reality it is meant to represent can be explicitly identified. This brings metaphor into conscious reality, prevents the metaphor from becoming the sole means for depicting the phenomenon, and can help the learner transition from the metaphor to a more thorough comprehension.

Pedagogical Metaphor

Metaphors expounded as just described are better called pedagogical analogies, where the reader or listener is invited to make a feature-by-feature comparison, and each parallel can be

evaluated, confirmed or refuted, between the conflict phenomenon under discussion and the metaphors being used. This will reveal more explicitly the strengths and limitations of the metaphors, including their potentially illuminating or misleading aspects. Such a deliberately explicit and consciously-made metaphoric comparison serves two purposes: as a teaching aid or pedagogical device to aid learners in understanding conflict; and when there is a theoretical claim that conflict has precisely the same features as the metaphor. Both of these goals are served by clarifying, refining, and enhancing the metaphors used and the manner of their use.

Full Familiarity With Apt Metaphors – Expansion and Elaboration

To do this it would be necessary to devise ways that the source domains might be consciously and deliberately accessed for their greater descriptive and explanatory power, and evolved further to be capable of explaining greater complexity. Strong frames are needed that better express intended meaning by adding structure, clarifying what conflict is, how it operates, the logic of why it increases or decreases, so that inferences are more usefully drawn and reasoning about conflict is enhanced. Examination of the source domains of the metaphors reported found in this study reveals that they could be exploited to do much more work in making ideas and concepts clear.

Lakoff & Turner (1989) illustrate that elaborations of metaphors involve additional features of an already-used sub-domain. For example, describing more fully the sub-domain of “path” to include curbs, surface contours, or trail conditions could elaborate the metaphor already found (CONFLICT IS LIMITS TO MOVEMENT: “in conflict, the *constraining* influence of our moral *guides*, as found”) would express in concrete, physical terms the manner in which paths guide movement through passive channels.

Lakoff and Turner also describe extensions of metaphors as involving the selection of sub-domains not yet used (e.g., making use of the sub-domain of “vehicle” in the Journey metaphor – one not found in either corpus). When metaphors are frequently and broadly enough used so as to be deemed operating conceptually in the authors’ thinking (as has been found here) other sub-domains, extensions and elaborations might more easily be introduced, fitting readily into the same cognitive structures while broadening and developing them.

The Journey metaphor has enormous intricacy and flexibility that can be used in describing and explaining. Smith (2005), in identifying Journey metaphors in negotiation dialog, shows how they manifest in a variety of unexpected ways and combine with Dramaturgical and Game

metaphors. However, the Journey metaphor is generally sequential, two-dimensional, reliant on mechanical movement and force dynamics.

A number of possibly useful elaborations of existing sub-domains in the Journey metaphor might be proposed. Mediation experts refer to moving “towards” certain outcomes and “maps” of conflict that imply two-dimensional space. When different “levels” and the “underground” aspects of conflict are mentioned this evokes both the framing and foundational sub-domains of the Building Construction metaphor and also possible additional dimensions of the territory sub-domain of the Journey metaphor. Implicitly, therefore, we already find multiple dimensions being spoken of metaphorically, and it may enhance understanding to make this more explicit and to exploit this multi-dimensionality notion by speaking of conflict in terms of entities or agents moving simultaneously on a multi-dimensional topology, with multiple possible destinations. The result could be a much more intuitive visualizing and conceptualizing of the formation, changes, and resolution of conflict.

To illustrate simple extensions of the Journey metaphor, consider the sub-domain of “vehicle” often found in other literature as part of the Journey metaphor but not, as yet, in the conflict literature. Such an extension might be profitably introduced in describing the container in which social groupings involved in conflict (pairs, families, communities, etc.) tend to move together in the conflict space with much of the same baggage, accommodating to each other in close proximity, stopping, starting together and, for certain purposes, acting as a unified entity. Conscious use of this sub-domain may help in characterizing diverse groupings and avoid the oft-used but potentially misleading characterization of groups as persons.

Such extensions and elaborations may be the most useful when individual metaphors project images or ideas as what Lakoff (1993) calls “basic level” concepts – those recognizable in terms of images or concrete physical actions, for example: CONFLICT IS START OF JOURNEY; MEDIATION IS PATH; AGREEMENT IS DESTINATION; CONFLICT IS MANIPULABLE OBJECT. Being more concrete and more capable of evoking images or ideas of structured action the metaphoric frames are stronger yet.

Finding Additional Apt Metaphors

As an example of a metaphor presented as an analogy that is vivid and appealing we find conflict in the first corpus described in terms of stepping on another’s feet while dancing (Kovach 2000). This dance metaphor is elaborated by this author but used only once and it may be limited in its applicability. The notions of “roles,” people who are “prompted” to “gesture” or act

“dramatically” illustrate a theatric, dramaturgical metaphor (Gelfand & McCusker 2001, Smith 2005); it can incorporate many of the same features as the Journey metaphor and very naturally includes narrative. Other metaphors found minimally in these corpora but which have promise for more fully describing and explaining conflict are illness and injury, which may be formed as elaborations of the Personification-Animated Being metaphor. Although War/Struggle (Haynes, 1999) and Game metaphors (Gelfand & McCusker 2001) have been mentioned as dominant in Western mediation and negotiation literature, we have not found them to be strong here.

Gelfand & McCusker (2001) advocate the generation of new metaphors to advance our understanding of conflict and negotiation, and this study, exploring innovations in metaphor use between conflict theorists, found the differences at the level of sub-domain mappings rather than at the level of entirely new metaphors. This suggests, then, that useful innovation might be more profitably sought at the sub-domain level, which in fact may be more easily and reliably accessed, than at the level of creating entirely new metaphors.

Further Research

To conclude it is useful to suggest several possible research refinements and directions for the future.

This study proceeded with well-defined, if less refined, procedures for detecting and identifying metaphors that have been used in metaphor research elsewhere (Cameron & Low 1999, Charteris-Black 2004). Cameron (2003) and Praglejazz Group (2007) suggest methods to increase the thoroughness in apprehending metaphors and these should be pursued where possible in future studies, including the use of multiple scorers and measures of scorer reliability. The definition of metaphor sub-domains and sub-mappings is attempted in some metaphor research (Charteris-Black 2004) and was similarly done here, but could be made more precise; since so many of the important findings of this study were in terms of these qualitative variations in metaphors, clearer definitions should be developed and tested.

The question arises whether these results are peculiar to the professional literature of mediators as studied here. For example the literature of conflict theorists other than mediators, or other social science literature, might be compared. Segments of the literature that do not necessarily contain the words “conflict,” “dispute” or “agreement” might also be examined, and such studies could be expedited through a search for the key words found here (Cameron & Diegnan 2003).

We have been concerned here with a profession’s capacity to impart its expertise, to bring the most promising developments in theory and research into practice. Researchers working with

Dynamical Systems Theory have begun to use computer simulations as a iterative, schematic device to make more evident and accessible the assumptions and structures of their theory. Such simulations become pedagogic analogies that can be examined, varied, and tested by teachers and students. In one sense they take the place of purely linguistic metaphors by projecting the characteristics of a well-defined, concretely understood system onto the phenomenon of conflict that conflict experts are trying better to understand and to teach about.

But, although simulations are precisely defined and concretely knowable, their principles are very complex and may remain mysterious to all but those with long experience in working with such tools. Consequently, the creators of computer simulations inevitably introduce new linguistic metaphors, or variations of familiar ones (e.g., attractors as discussed above), to help us comprehend the simulation model. Such new metaphors could be tested for their effectiveness in communicating about the well-defined attributes and dynamic nature of simulation models. This may be a fertile area for evaluating the characteristics of metaphors most effective in this regard, in particular the conscious use of carefully formed metaphors. Can we enable a group of people to communicate and teach the dynamical systems theory of conflict, or any other innovation in our understanding, with and without such metaphoric superstructures and, in this way, study the differences in results of the pedagogy?

Although additional empirical investigations will shed further light, we may consider introducing enhancements of the Journey and Personification/Animation metaphors into the professional literature on the basis of the findings here. This could include more creative and imaginative use of these metaphors, attempts to give continuity to metaphors that have sufficient explanatory power, and following some of the suggestions mentioned above regarding expansion and elaboration of apt metaphors.

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