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Behavior Prescriptions versus Professional Identities in Multi-cultural Corporations: A Cross-cultural Computer Simulation

Abstract

There is a strong focus on cognitive, language based, information processing in organizations. Acknowledging the gut decision of managers, this article introduces a symbolic interactionist framework that allows the investigation of organizational behavior based on affective meaning. Unlike most symbolic interactionist approaches, affect control theory is based on rigorous mathematical formalization that allows precise empirical methodologies. The effectiveness of this affective model is demonstrated in a multicultural setting where cultural differences and language differences make the communication within the organization difficult. Computer-based simulations of interaction address the problem of managers following culture-centric behavior prescriptions instead of using the affective meaning of their professional identities as guidance for their behavior.

Descriptors: computer simulation, authority, cross-cultural, meaning, symbolic interactionism

Behavior Prescriptions versus Professional Identities in Multi-cultural Corporations: A Cross-cultural Computer Simulation

In today's international markets, problems typically arise if international corporations develop behavior strategies locally and try to implement them globally. One might argue that this is justified since advances in transportation and communication homogenized the middle class culture to an extent that cultural differences can be neglected in international management. In contrast, this work argues that even though cultural differences might not be apparent in many domains, they can be pronounced in specific areas. One systematic cultural difference lies in the authority concept (Hofstede 1980; 1991; Inglehart 1977; 1990; 1997; Inglehart & Baker 2000; Schneider 1999a; 1999b), which is central for problems of global strategies in international corporations. To identify and overcome potential problems caused by cultural differences, we should concentrate on affective meaning, which might differ even if management objectives are perfectly translated linguistically. The argument will be tested, that if the affective meaning of professional identities differs cross-culturally, it is more efficient for the maintenance of professional identities, if professionals act upon the affective meaning of their identities, than to follow culturally uniform behavior prescriptions.

In the global perspective employed here, culture is not treated as a utilitarian tool for the achievement of organizational goals as it is seen by the rationalist perspective of culture (Peters & Waterman 1982). Neither is culture defined as a functionalist product of survival achieved by successful external adaptation and internal integration (Parsons 1951; Schein 1985).

Instead, culture is seen in the symbolic tradition, as a pattern of socially constructed symbols and meanings (Geertz 1973/1993; Turner 1990). However, the concern is not about organizational culture, the beliefs, values and meanings that members of an organization use to grasp the uniqueness of their organization (Hofstede 1991; Schultz 1994), but about more widely shared cultural differences in sentiments that, independent from the organization, have an effect on behavior in organizations.

If global strategies are transformed into operatives and implemented globally, local professional actors are confronted with culture-centric operatives. In international corporations with multiple local languages, culture-centrism of management strategies is not the only problem. In most contemporary organizations, strategies are presented in form of written guidelines or policies that either explicitly or implicitly convey behavior prescription for employees and/or associates. If multinational corporations use multiple languages, translations of strategies add another potential for cultural misunderstandings. Although two cultures might agree on a lexical categorization, the language translation or denotation of identities and behaviors that describe an event, the connotation or affective meaning of these identities and behaviors might still differ. Some current management theories define affect as a temporary shift in moods (Baron 1993). Affective states, or moods, are seen as emotion-like states (Kraiger & Billings 1989). Affect is also addressed as emotional labor, the display of expected emotions (Ashforth & Humphrey 1993). In this work, affect is not just another term for traits, emotions, or emotion work. Affect is a central mode of information processing. Affective meaning or connotative meaning, can be contrasted to cognitive meaning, language, lexical

categorization, or denotative meaning. As David Heise (1987:6) states: "Classifications of places, people, objects and behavior get transformed into a domain of feelings, where things lose their qualitative uniqueness, become comparable to one another, and begin obeying quantitative principles. This is analogous to observing that Sun, Earth, Mars, Saturn etc., are identifiable by their unique characteristics, but the dynamics of the solar system are governed by the distances, masses, and velocities of these bodies and the operation of physical laws." Affect and cognition describe two parts of the same coin, a sentiment (Osgood 1974). Affect is general, cognition specific. Affect allows rapid processing of information and eases decisions, whereas cognition enables rational justification and formal communication. Within a symbolic interactionist approach, elements of events can be seen as affectively represented. Working with affective meaning allows using general principles of information processing. These general principles are generated empirically in the form of impression formation equations, the basic dynamic in computer simulation of human behavior.

Affective Meaning

In one of the largest social science research projects ever conducted, Osgood, May and Miron (1975) found evidence for the cross-cultural universality of the evaluation (E), potency (P), and activity (A) dimensions (EPA dimensions) of affective response. Semantic scaling on EPA dimensions allows valid and reliable measures of affective meaning of sentiments (Osgood 1962; Osgood et al.1975). The fundamental work of Osgood established the principle of affective representation and the three dimensional semantic scaling of affective meaning as a

cultural universal. It also demonstrated that ratings on these scales are highly discriminate measures of cultural specific meanings. Both properties, the cultural universality of the instrument and the cultural particularity of the measurements are core prerequisites for valid cross-cultural comparisons.

It is the affective meaning of an identity, not only its cognitive representation, which is central for the fast processing of information. Matching affective meaning in two cultures, 'we are thus applying the psycholinguistic definition of similarity of meaning -- similarity in distribution of usage -- across languages' (Osgood 1974: 244). The quality or ease of translation-equivalence of identities (linguistic definition) does not imply similarity in the affective definition (psycholinguistic definition). The example used here is an Anglicism, such as the term *manager.* In the remainder of this article, italicized identities refer to empirical examples. On a scale that reaches from -4.33 to 4.33, the affective representation of a U.S. *manager* can be described as +0.6 evaluation, +1.3 potency, and +0.1 activity. Following the standard of Heise and Lewis (1988), these EPA profiles will be indexed as (0.6, 1.3, 0.1). The affective meaning of the U.S. *manager* stands very much in contrast to the German *manager* (-0.3, 1.6, 1.7). It is striking that in Germany, *managers* do not carry such high status as in North America. The second professional identity chosen to interact with the manager in the simulations is cross-culturally more similar. The German *Berater* (1.3, 0.8, -0.5) is the linguistic translation equivalent of the U.S. *advisor* (1.0, 1.3, -0.7). The *advisor* is chosen as a professional identity that can be seen as a direct subordinate that might complement the *manager* in a corporate context.

Symbolic Interactionism

Both concepts, behaviors and identities, are central to the symbolic interactionist perspective (Cooley 1922; Mead 1934) that sees them as essential components of events. Events can include multiple identities, their behaviors, emotions, trait attributions and the setting of their interaction. Here the focus lies on minimum events established by two persons, each holding one specific identity, and the interpersonal behavior. One person, the actor, initiates an interpersonal behavior. The other person, the object, is acted upon. Accepting events as the minimum unit of analysis, symbolic interactionism developed in two directions: the Chicago school of processual symbolic interactionism (Blumer 1969; Turner 1962; 1973) and the Iowa school of structural symbolic interactionism (Kuhn 1964/1972). The extreme processual approach doubts that social structural influences guide the interaction and assumes that the meaning of each situation is negotiated each time we enter the event. The processual or construction approach of the Chicago School focuses on qualitative descriptive analysis, and cannot account for stability and predictability of behavior. In contrast, the extreme structural approach of the Iowa school, just like role theory (Darendorf 1965; Heiss 1981; Merton 1973; Turner 1962; 1972), sees identities as fixed structural entities. Role theory addresses the constraints of society, but does not account for the dynamics introduced by the negotiation of culture-specific meaning in the interaction.

What is used here, is a relatively new strain of symbolic interactionism (Burke 1980; Burke and Reitzes 1981), that acknowledges the negotiation of meaning in the situation while

integrating the more structural concepts of identity theory (Stryker 1980; 1992; McCall&Simmons 1978). This approach, also referred to as the Indiana school of symbolic interactionism, integrates culture structure and social structure as the main determinants of human behavior. The integrative perspective of symbolic interactionism is most suited for cross-cultural comparisons of structural constraints like management strategies while allowing the construction of culture-specific behavior.

Cultural differences in the affective meaning of professional identities and behaviors are critical factors when top managers have to decide on the global implementation of management strategies. This problem will be investigated with the latest theoretical development of the Indiana school, the only symbolic interactionist theory with rigorous mathematical formalization: Affect Control Theory (ACT).

Affect Control Theory (ACT)

ACT (Heise 1987; 2000; MacKinnon 1994; Smith-Lovin 1987; Smith-Lovin and Heise 1988; Schneider & Heise 1995) integrates attribution theory (Heider 1958) with the Indiana school of symbolic interactionism. It adds a quantitative focus on the affective representation of meaning (Osgood 1962; 1975) and the processing of meaning (McPhail; Powers &Tucker 1992; Powers 1980). This allows ACT to operationalize the symbolic interactionist approach to an extent that enables computer simulations of human interactions. Interactions change the affective states of the participants who will account for this change with attributions like labeling or behavior.

Processing of Meaning

Rational choice assumes that people use elaborated cognitive selection mechanisms for their behavior. Another inventory model, role theory, assumes that information about appropriate behavior is stored with the cognitive information about roles and their relations. In the generative model of ACT, the choice of behavior is not guided by tedious selection mechanisms, or learning minute behavior descriptions and contingencies that overburden our cognitive system. Instead, there are general affective rules that help to confirm an identity. The affective decision within an event is faster and subjectively more reliable than any cognitive construction of behavior. This is reflected in the statement of many managers that their decisions come from their guts.

Successful management of an identity is contingent upon other people in the event (Goffman 1959; 1967). Once the event is established and context is added, the components of the event will change their affective representations. A *manager* who *shouts* at his *advisor* will change his own affective representation in the context of this disturbing event. In ACT terminology these in-context-ratings are called transient impressions because they are temporary in nature. Once in context, dynamic social principles change the static representation of the components of an event into their transient impressions. Persons compare their transient impressions, achieved in the event, with their initial identities, their fundamental sentiment. These differences are called deflections. Deflections can be conceptualized as a form of stress. Minimizing deflections or stress, participants of the event create normative

events. ACT suggests that:

> 'People try to experience events that generate transient impressions optimally close to fundamental sentiments, and when events generate incongruous impressions, people initiate restorative actions and cognitive revisions to bring transient feelings back into line with established sentiments' (MacKinnon and Heise 1993: 64).

Actor, behavior, and object constellations that define minimum events in the symbolic interactionist tradition are represented affectively. The operationalization of the dynamics within an event is rooted in the impression-formation research, or more generally, the attitude change tradition (Gollob 1968; 1974; Gollob and Rossman 1973; Osgood and Ferguson 1957; Triandis and Fishbein 1963) that extends basic balance theory assumptions (Heider 1958, 1967). This tradition of research has been focusing on estimating the weights in impression-formation equations and on researching which additional terms improve accuracy of predictions (e.g., Heise 1969; 1970; Heise and Smith-Lovin 1981; Britt and Heise 1992, Smith-Lovin 1979; 1987; Smith, Matsuno, and Umino 1994). Impression-formation equations contain the empirically generated rules that we use to produce normative events. Following the early balance theoretical tradition (Heider 1967), simple rules would be, for example: good people do good things to good people, or good people do bad things to bad people. Impression-formation equations, using not only the dichotomous variable of good versus bad, but continuous measurements on the three EPA dimensions of affective meaning, are much more refined in their predictions.

People use language to communicate information, while their responses are processed

affectively. This problem can be exemplified by comparing the effect of psycholinguistic translation with linguistic translations. Even if the language of management objectives is perfectly translated, the translation of meaning of these objectives will still be subject to systematic culture-specific flaws. Cross-cultural computer simulations based on affective meaning indicate the problems that arise with linguistic translations of behavior prescriptions. Two hypotheses are generated:

(1) If the affective meaning of identities differs cross-culturally, interactants are able to choose behavior that stabilizes their professional identities as long as they rely on their identities.

(2) If the affective meaning of identities differs cross-culturally, behavior prescriptions that support interactants in one culture will disturb the maintenance of their professional identities in another culture.

Methodology

Sample

In the North American study of the affective representation of sentiments (Heise & Lewis 1988, Smith-Lovin & Heise 1987), data were collected by questionnaire from more than 1,000 undergraduates in North Carolina. The Doubleday Dictionary (Landau 1975) was used to choose a broad range of general concepts to be rated on Evaluation, Potency, and Activity (EPA) dimensions. The poles of the scales were defined with clusters of adjectives:

Evaluation: good, nice - bad, awful
Potency: big, powerful - little, powerless
Activity: fast, young, noisy - slow, old, quiet

Interval scales were used to compute means on all three EPA differential scales. Intervals between the points are labeled as 'neutral,' 'slightly, ' 'quite,' and 'extremely'. They were coded as differences of 1.0, corresponding to visual distance on the scale. Differences between the scale endpoints 'extremely' and 'infinitely' were coded 1.33, again corresponding to visual scale distances.

The German study (Schneider 1990) was designed to be comparable with the U.S. study. It used the same instrument of semantic differential scales; however, they were translated (Schneider 1996). The existing U.S. dictionary was used for the construction of the German stimuli set where 1,042 concepts were translated into German by a fluent, bilingual, native German speaker. Then the method of blind back-translation (Krebs and Schuessler 1987) was employed: a bilingual person translated the 1,042 German concepts back into English. All concepts whose back-translation matched the original English word were selected for further studies. The remainder was examined by a native of the U.S. culture, and words whose back-translations were identical or synonymous with the original also were selected. The resulting list of 768 well-translated concepts was used as stimuli for the German data collection.

In the German sample the U.S. undergraduate is replicated matching age and the number of school years (Schneider 1996; Spring 1986). Pupils of the last year in the *Gymnasium* (the only of three German school types that serves as a prerequisite for entering a university) were added

to the lower-level university students (*Vordiplomstudenten*) to replicate the U.S. undergraduates. About 400 subjects were recruited from Mannheim University and two schools in Mannheim, a large industrial city attracting students mainly from the Rhein-Neckar region in former West Germany.

The study is designed for cross-cultural comparison. Therefore, the sampling intends to maximize equivalence between the U.S. and German sample and not the representativeness of either sample. The study is 'faced with a dilemma common in cross-cultural work: maximizing representativeness within usually means minimizing equivalence between' (Osgood 1974: 241). Still, while restricted to a specific age cohort, students represent the middle-class culture that we expect to meet in managerial positions in international corporations (Hofstede 1991). Subjects are not used to judge organization-specific questions, raised in the current organization culture discussion (Schultz 1995). Instead, they serve as cultural informants who are highly representative of their general national culture (Romney et al 1986). In this context, the author uses the convenient generalization of Americans and Germans in the following cross-cultural comparison.

Simulations

Simulations are an empirical/mathematical operationalization of ACT. The theoretical framework of ACT itself is tested empirically (Heise 1987; Heise & Weir 1999; Schneider & Heise 1995; Smith Lovin & Heise 1985; Wiggins & Heise 1987). The same is true for the operationalization of ACT with its methodological instrument INTERACT (Heise 2000; Heise

& Thomas 1989; Schneider 1990; Smith-Lovin 1987) and its simulation rules, the impression formation equations (Heise & MacKinnon 1987; Smith and Matsuno 1994; forthcoming; Smith-Lovin and Heise 1982).

Following the hypothetico-deductive method of theoretical inquiry (Hempel 1962; Popper 1959; 1968; Wallace 1983), new questions have to be addressed with new data. Working with simulations, a set of rules is used to generate new specific data from more general existing data. In the case of INTERACT, a computer-based simulation program, both simulation rules, embedded in the impression formation equation, and data on identities and behaviors are obtained empirically. Since impression formation equations are largely shared in Western cultures (Smith Lovin 1987), they are general. In contrast, the sample data (EPA profiles) on identities and behaviors (Heise & Levis 1988; Schneider 1990; Smith & Matsumo 1994; MacKinnon 1994) are highly culture specific. If the theoretical framework, the rules of the simulations, is tested empirically, practitioners can use data to investigate specific questions. If simulations should relate to problems outside the established culture-specific sample of empirical data on identities and behaviors, new data has to be collected.

For the dynamics of the simulation, impression formation equations are implemented in INTERACT (see table 1). Impression-formation equations describe how an event creates impressions of the actor, the behavior, and the object. They are generated empirically by regressing in-context ratings on out-of-context ratings (Heise and Smith-Lovin 1981; Smith-Lovin 1987). Formulas are an empirical description of how in-context EPA ratings of the Actor (A') are regressed on out-of-context EPA ratings ($_e$, $_p$, and $_a$) of the actor (A), behavior

(B), and object (O) of the event. Ae' is the regression formula for the actor's evaluation in the event, Ap' the actor's potency, and Aa' the actor's activity. The remaining sets of equations generate the impressions of the other components of the event, such as the object person of the behavior (Oe', Op', Oa'), and the behavior (Be', Bp', Ba').

TABLE 1 ABOUT HERE

Using a language interface, INTERACT translates from language to affective meaning and vice versa. The ratings of affective meaning of identities and behaviors of the U.S. and German samples, the out-of-context ratings or fundamental sentiments, are stored in cultural dictionaries that are accessed by INTERACT. The user of INTERACT can choose identities and behaviors from these dictionaries to build events to be investigated. Once the event is created, the transient impressions of the actor, the behavior, and the object of the behavior are calculated with impression-formation equations. Following ACT, INTERACT now creates new normative events by minimizing deflections, the difference between the fundamental sentiment and its transient impression. Following the idea of labeling, the ideal identity that accounts for an event is identified mathematically. In addition, behavior appropriate in reestablishing initial identities is calculated.

In a basic event of one actor doing something to an object person, three basic questions can be addressed in simulations. Searching for the normative identity of the actor, we ask: 'Who would behave like that towards the object person?' If we like to determine the appropriate

object person's identity in an event, we keep the actor identities and their behaviors constant and ask: 'Who is the appropriate recipient of this behavior emitted by this actor?' Searching for the behavior that confirms the actor and object identity, the question is: 'What would someone do to a specific other?'

On a mathematical level, simulations search for affective meaning of identities and behaviors that would account for a given event. This can be done by transforming the empirical impression-formation equations. The deflection created by an event is minimized (set to zero) and the equations are solved for the EPA profile of either the actor, the behavior, or the object of the behavior (Heise 1987; 1999). Transformed equations calculate the affective meaning of an actor, object, or behavior that would account for the deflection and make the event normative. Concepts whose EPA profile fits best with the predictions are chosen from INTERACT's database of sentiments. In this way, the empirical procedure is translated back into a qualitative level of language-based analysis that shows the suggested behavior and the new identity assigned in a labeling procedure.

Methodological Control Mechanisms in the Computer Simulation

Institutional Context

Role theory catalogs a finite number of behavioral expectations that people expect to be fulfilled in a particular position. In contrast, identity theory and ACT are generative models that choose from an infinite number of interpersonal acts or attributions to confirm an identity. In inventory models role expectations are restricted by limited cognitive prescriptions that

account for the context of an identity. Because of the infinite number of possible events, and the affective nature of behaviors and attributions ACT, like any other generative model, needs contextual filters.

We affectively choose the affective meanings of behaviors or identities that appear appropriate in an interaction. If we, for example, find it affectively appropriate to choose a *nice* and *powerful* identity, we might have a *lover*, a *husband*, a *medic*, or an *expert* in mind. Cognitively we have to choose if an identity or behavior fits the context of an event. Since institutional categories are part of the problem addressed in this work, INTERACT's institutional filters are shut off in the simulations.

Actor-Object Constellations

Simulation designs are controlled for the actor/object constellation, for the duration of the interaction, and for gender differences. Depending on the actor/object constellation, identical identities can contribute differently to the definition of an event. This is reflected in the impression-formation equations of INTERACT. Here the loss of potency for an identity that is acted upon is one of the major effects of being an object. In all three simulation designs, the actor/object constellation effect is controlled in the interpretation process by comparing only events with the same actor/object constellation.

Duration of the Interaction

The duration of the interaction is relevant in a simulation design that generates behavior that is

later implemented in upcoming events. The necessary duration of the interactions is determined in the process of interaction. Simulated behavior is empirically normative; if no other changes are made in the definition of the event, it should stabilize at equilibrium. This can be observed in unconstrained interactions where no disturbing behavior is forced in the interactions. In unconstrained interactions, the simulated behavior is implemented in the next round of simulations. After several rounds of unconstrained simulations, the same events will reappear. The first event of this equilibrium is taken as the cut-off point for presenting the simulation results.

Gender Considerations

Comparing qualitative and quantitative differences in a two (constrained, and unconstrained interactions) by two (cultures) design is a complex task for the researcher and the reader. Expanding this design by adding a gender dimension would only be advisable if gender is of theoretical interest. EPA ratings and impression-formation equations are available for both females and males; however, only data on males are used for the following simulations. Since traditional research on leadership is used for the interpretation of the results, and most of the empirical support of the literature is collected with male subjects, only data collected from males and impression-formation equations generated from males are used in the simulations. For that reason, empirical identities will be treated in their male form.

Simulation Design

To investigate the question if both identities are able to maintain their professional identities within their culture if they follow the affective meaning of their identities, the first set of simulations runs four events in the U.S. and in the German culture. In the second set of four events, simulations test the impact of identical behavior prescriptions on both professional identities in each culture. In the first event of the first set of simulations, the professional identities of a *manager* and an *advisor* are implemented by the researcher. For every event, INTERACT uses the impression-formation equation to calculate the affective meaning of the actor identity, the object identity, and the behavior that give the closest normative fit for an event. INTERACT then picks the new actor and object identities and the new behavior that is closest to the calculated affective meaning from the database. Behavior predictions of one event are implemented in the simulation of the subsequent event. This set of simulations, in which events are only structured by participating identities, but not constrained by behavior prescriptions, will be called unconstrained. In the constrained design, identical behavior prescriptions are implemented in both cultures. As in the unconstrained design, actors and objects that account for the created events are selected. In the following event, these empirically calculated actors and objects then follow the next prescribed behavior. Since this design imposes behavior prescriptions of the management on the interacting identities, it is called the constrained design.

The behaviors of *correcting* and *disciplining* are chosen by the researcher and implemented. Both behaviors can be seen within a range of possible behavior prescriptions for managers in

crisis management. The constrained design tests whether the stabilizing effect of prescribed behaviors will be wiped out by a possible disruption of culturally inappropriate role performance, based on affect. Possible disturbances of prescribed behaviors are determined by comparing results of the constrained interactions with the unconstrained interactions of the unconstrained design. In this way, the unconstrained design serves as a control condition for the constrained design.

The experimental design of the simulations is summarized in Table 2. In the column "choice of initial identity," the cell "theoretical" indicates that under all conditions the researcher fires off the first event. In the following events, identities are computer generated under all conditions. Under the condition of constrained behavior, the cell "theoretical" again implies that behavior is implemented by the researcher. In contrast, under the condition of unconstrained behavior, behaviors are computer generated. The number of simulations is determined by the theoretical question, and the cutoff point that is empirically defined by the equilibrium reached in a normative simulation.

TABLE 2 ABOUT HERE

Results

Figures 1 to 4 present the summarized results of the simulations with INTERACT. Since

INTERACT is a computer-based operationalization of ACT, key theoretical concepts have to be part of the interpretation of the results. The *fundamental sentiments* are the out-of-context ratings of actors, behaviors or the object of behaviors. The *present transient* is the EPA rating of affective meaning that is used for the actor, behavior, and object of the event that enters the simulation. The *present transient* describes the current affective representation of the actor or object. Logically, in the first event of a simulation, the *present transient* is identical to the *fundamental sentiment*. The *new transient* is the temporary affective impression of the actor, behavior, and object.

Comparing the *present transient* with the *fundamental sentiment*, we can see how this identity was altered by previous events. The reader should be reminded that the change of one identity in the course of events can only be compared to another identity if both identities have the same actor-object constellation. The *new identity* is the identity that in the labeling process accounts for the event. This *new identity* of a person would normatively explain the event without making changes of the other identity or the behavior necessary. It defines the 'ideal identity that would explain the person's participation in the event' (Heise 1993: 17).

The interpretation of a substantial qualitative difference in an identity is based on its statistically significant difference in its EPA ratings. A 5% confidence interval and average standard deviations of the EPA ratings are used to indicate statistically significant differences in EPA profiles at below one unit difference on the EPA scale. One unit statistical difference in the EPA profile is therefore a good indicator for quantitative substantial differences between identities. This one-unit rule will help in the interpretation of the quantitative output of the

computer simulations summarized in figures one to four.

Unconstrained Interaction

In the first event in the simulations with U.S. data (Figure 1), INTERACT uses the empirical information of the impression-formation equations and the fundamental sentiments of the *manager* and the *advisor* to calculate the normatively most appropriate event. The *advisor* is seen as being most appropriate in the acting position and the *manager* to be the object of his action. In this actor-object constellation, *cautioning* is chosen as being the behavior closest to the EPA profile of the most normative behavior. In return the *manager lifts up* the *advisor*. In the third event the *advisor explains something* to the *manager*. Finally, in the fourth event, the *manager congratulates* the *advisor*.

The potency and activity of the manager did not change in the course of the interaction. When the U.S. *manager* gains evaluation, he becomes comparable to an identity of a *lover (event #4)*. As stated in the methodological consideration for the computer simulation, institutional filters of the simulation are shut off. The *lover* identity, reported by INTERACT, has to be seen without institutional constraint. The *lover* stands for an identity that is rated on the average as: quite nice (1.7), slightly powerful (1.3), and between neutral and slightly lively (0.5). Being a *lover*, the *manager* is not a sexual harasser at his workplace. The *lover* identity should be interpreted according to its affective meaning and then put into the corporate context where love should be interpreted as devotion.

The fundamental sentiment of the advisor can be compared to his new identity of a

gentleman in event #3. In the interaction the *advisor* does not gain as much evaluation (0.7) as the *manager* (1.1). Like the *manager*, his potency and activity stayed unchanged. The *advisor* shows a less substantial gain in evaluation. He leaves the fourth event as an *innocent* with an evaluation of 1.5 compared to the 1.0 of his original *advisor* identity.

FIGURE 1 ABOUT HERE

Moving to the German unconstrained simulations, we immediately recognize the different actor-object constellation calculated by INTERACT. It makes sense intuitively that the more active a person is, the more likely he will be to open the interaction. Indeed, activation is, besides potency, an important influence on the actor-object constellation. Being more active and potent than the *advisor*, the German *manager* is more likely than the *advisor* to open the interaction. The potency and activity differential between the *manager* and *advisor* is higher than in North America.

The scheme of comparison that controls for the actor-object constellation effect is different in the German unconstrained simulations (figure 2). Changes of the *manager* identity are to be compared for event one and three. Judging the *advisor's* behaviors, the first and second events should be chosen. If we compare the *manager's* new identity of a *car driver* (-0.4, 1.1, 1.5) in the third scene to his fundamental sentiment (-0.3, 1.6, 1.7), we see that the interaction did not cause substantial change for the *manager*. The advisor's fundamental sentiment (1.3, 0.8, -0.5) should be compared with his new identity of a *coworker* (1.5, 0.6, -0.1) in the fourth event.

Again, there is no substantial change in the affective representation of the interactants.

The cross-cultural difference is especially pronounced for the *manager's* evaluation and vividness. Having a lower evaluation, the German *manager* has to *extol* the *advisor* to bridge the status gap. The higher status U.S. *manager* does not have to engage in this obsequious behavior. In the second event the *advisor informs* the *manger,* who in turn *contradicts* him. Finally, the *advisor suggests something* to the *manager*. As in the U.S. simulation, all of the computed behaviors seem to be appropriate in the corporate setting of a manager and advisor. In the German unconstrained interaction the *manager* is not able to gain status. The interaction is, however, successful in keeping up the *manager's* and *advisor's* original affective representations.

FIGURE 2 ABOUT HERE

Interaction as Constrained by Behavior Prescriptions

Simulations in figures three and four are chosen to demonstrate the extent to which identical (culture-centric) behavior prescriptions have a different impact in different cultures. Generally, management theories favor positive behavior for superiors and subordinates. Since it is rather interesting to see if people are able to maintain professional identities if they have to deal with conflict, it is decided against the implementation of such behavior. Behaviors are chosen that are not necessary behaviors suggested for the typical encounter in an office, but for intervention in conflict or crisis situations. *Correcting* and *disciplining* the *advisor* are

behaviors that are within a range of possible behavior prescriptions for *managers*.

Figure three shows the constrained interactions in the U.S. culture. The *manager* starts the interaction in *correcting* the *advisor*. Receiving the *advisor's* reply, the manager *disciplines* his *advisor*. Being *corrected* and *disciplined,* the *advisor* reacts by *explaining something* to the *manager*.

Controlling for the actor-object constellation effect, we compare the fundamental sentiment of the *manager* to his new identity as a *sophisticate* (-0.1, 1.0, -0.2) in the third event. Accordingly, the fundamental sentiment of the *advisor* is compared with his new identity as a *scoutmaster* (1.5, 1.2, -0.5) in the fourth event. Both interactants keep the potency and activity of their identities. The *advisor* slightly improves his status. Labeled a *sophisticate,* the *manager* loses his slightly positive status and becomes more neutral on the evaluation dimension. None of the status changes is substantial. Compared with the unconstrained interactions, the introduction of prescribed behavior causes only minor disturbance in the U.S. interactions.

FIGURE 3 ABOUT HERE

The same behaviors are implemented in the constrained simulations with the German data. Being *corrected* and *disciplined,* the German *advisor* first *commends* and then *talks to* the *manager* (Figure 4). The implemented behaviors are more stressful for the participants in the German simulations than in the U.S. simulation. Both interactants lost status and had to adjust

substantially. The *manager* suffered the worst loss. He confirmed a deviant identity of an *adulterer* (-1.5, 0.8, 0.5) and lost some of his power. This redefinition shows that he has lost any basis for corporate leadership. As an *eyewitness* (0.4, 0.0, 0.4), the *advisor* has lost status and some power as well.

FIGURE 4 ABOUT HERE

Interpretation of the Simulations

So far, the simulation results were presented as an elaboration of the computer output. To facilitate the qualitative evaluation of the hypotheses, the simulation results are now phrased within several models that describe successful leadership in corporations.

Unconstrained Interaction

Several management ideologies in the charismatic leadership tradition see leadership as a social contagion process (Wheeler 1966). Rising status, which is observed in the U.S. simulations, helps managers in their charismatic leadership tasks. Having the opportunity to interact with high status people also raises the status of subordinates. This can be interpreted as a positive social contagion process, induced by successful leadership behavior. Other indicators of a successful contagion are the positive behaviors of *cautioning*, *uplifting*, *explaining*, and *congratulating*.

The vertical dyad linkage model (Danserau et al. 1975; Veccio & Gobdel 1984) views leadership as an exchange process between the superior and subordinate. Exchange properties are the time spent with positive interactions and the maintenance of the high status of the leader and the follower. As with the charismatic leadership model, the vertical dyad linkage model also uses the rising status of the interactants as the main indicator of successful leadership. According to the vertical dyad linkage model, this indicates successful leadership behavior in the unconstrained U.S. simulations.

Burns (1978) points out that leaders are highly dependent on their followers. In the pursuit of common goals, their interactions can be labeled as transactional or transformational. In a transactional relationship (Bass 1981) leaders and followers create events that enable them to exchange satisfactions. Both interactants can be seen as exchanging psychological rather than monetary benefits. Transactional interactions are likely to be disturbed by the power differential between the leader and the follower. This is not the case in the U.S. simulations, where *managers* and *advisors* are equal in potency. This might be the reason why both interactants are able to mutually initiate status-enhancing events. In this sense the interaction can be interpreted as a transformational relationship. Here followers elevate into leaders and leaders into moral agents.

The status enhancement of both interactants and the positive constructive behavior is also critical for the four-factor theory of leadership (Parker 1989). Parker studied successful leaders and isolated factors of leadership behavior in which the positive influence of leaders produces positive results from followers. Indicating four factors of successful leadership behavior, their

theory stems from four empirically generated factors: climate, feedback, input, and output. Successful leadership is supposed to create a positive climate, give stimulating feedback, determine the resource input of the superior, and reward the output of the subordinate. The behavior of the leaders is supposed to create a supportive, warm, and friendly climate for their professional interaction. In the U.S. simulations *uplifting* and *congratulating* are explicit examples of behaviors that are intended to create such a positive climate. According to the four-factor theory, feedback from the superior has to be stimulating. This stimulation should help to create success and self-confidence. In the empirical example the *advisor* can be seen as being guided by the *manager's* behavior to create interactions that support and slightly enhance his own status. The input factor is mainly determined by resources contributed by the superior. Time contribution, coaching, and training are seen as interpersonal resources of the superior that can help the subordinate to accomplish the tasks sufficiently. In the simulations, after he is *uplifted,* the advisor *explains something to* the manager. Impressed by the *advisor's* performance, the *manager congratulates* the advisor. Again, simulation results show behavior that is suggested by the four-factor theory. The output factor is composed by behavior that rewards the creative approaches of the subordinate and supports less-than-superior results while the subordinate is experimenting. The endorsement of the output factor cannot be seen directly in the short simulation of four events. However, none of the interactions appear to hamper the successful leadership behavior of the output factor.

In the unconstrained U.S. simulations, identities are able to structure the interaction in a way that generates behavior that, in the light of the four-factor management theory, can be

interpreted as successful professional behavior. This can also be said if the other theories of charismatic leadership -- the transactional/transformational leadership model, and the vertical dyad linkage model -- are used as exemplary theoretical frameworks to interpret the simulation results. The unconstrained interaction with the U.S. data clearly supports professional identities and role-performance.

Applying the charismatic leadership model, the German manager is successful in maintaining the status of his subordinate and himself. In his initial effort to *extol* the *advisor,* the *manager* briefly lifts his own status. *Contradicting* the *advisor*, he immediately falls back to his initial negative status. Maintaining the status of the interactants, the German unconstrained interaction can be interpreted as being partially successful in the light of the charismatic leadership model. As in the U.S. unconstrained simulations, the interaction can also be seen as appropriate when the vertical dyad linkage model or the four-factor theory of leadership is used as a framework for interpretation.

The power differential, seen as critical in the transactional/transformational model, does not show a negative impact on the simulations. *Contradicting* the *advisor*, a behavior that might stem from power differentials, helps to recover the devalued identity of the *advisor*. He is able to change his temporary identity of a *gambler* back into a professionally more acceptable identity of a *coworker*.

In the simulation of unconstrained interaction, where interactants exclusively rely on the affective information of their professional identities, people in both cultures maintained identities that are appropriate for corporate settings. In light of the four management

ideologies, the U.S. simulations can be seen as even better examples of successful leadership behavior. The U.S. *manager* achieves dramatic status enhancement in his interaction. His fundamental sentiment of 0.6 rises to 1.7 on the evaluation dimension (event #4 in figure 1), a substantial increase in status. Since the German *manager* is able to keep his status, interactions can be seen as appropriate for him. However, he is not able to improve his status. In both cultures the subordinates are able to maintain their positive identities and even slightly increase their statuses as *advisors*.

In a qualitative interpretation in the context of leadership models in management, simulations in both cultures fail to disconfirm the first hypothesis that if the affective meaning of identities differs cross-culturally, interactants are able to choose behavior that stabilizes their professional identities as long as they rely on their identities.

Interaction as Constrained by Behavior Prescriptions

Culture-centric behavior descriptions showed very different effects in the U.S. and German cultures. People with identities that carry different affective meaning in both cultures need different behavior to confirm their identities. It is surprising that although Germans in the constrained interaction turned into deviants, their reactions to the prescribed behaviors appear appropriate. Being *corrected*, the *advisor* responds normatively and *commends* something. The *advisor talks to* the *manager* after he is *disciplined*. These responses sound just as normative as in the U.S. simulations where the *advisor* responds to the same behaviors with *instructing* the *manager* and *explaining something* to the *manager*. If practitioners only

observe the behavior, they will receive a wrong confirmation that their culture-centric behavior prescriptions worked well. Since behavioral responses appear appropriate, they will not realize that participants in the German culture will turn into deviants who lack any cultural legitimation to act within a corporate framework. Following orders from the U.S. headquarters, and replying with the happy-go-lucky scheme that appears just perfect to their U.S. colleagues, false confirmation of inappropriate behavior can lead to a (mis-)representation of the institution by persons who appear deviant in their local cultural environment.

Global management strategies that institutionally prescribe behavior can lead to changes that can be interpreted as constructive in the U.S. culture, but have a devastating effect in the German culture. Interpretations of the simulations fail to disconfirm the second hypothesis that if the affective meaning of identities differs cross-culturally, behavior prescriptions that support interactants in one culture will disturb the maintenance of their professional identities in another culture. These results also contrast with the positive change found in the unconstrained interaction. In the German culture the disturbance of the *manager* is so profound that it is hard to imagine that he interacts within a corporate frame (Goffman 1974; Hettlage 1991). The strong status decrease of the leader and the moderate status decrease of his follower make the German constrained interaction an example of unsuccessful leadership behavior. Following the behavior prescriptions, there is no charisma left. In the interaction, there is no indication for a positive social contagion process or a positive transaction, neither for the superior nor the subordinate. There is no warm and friendly climate that constitutes an important indicator in the four-factor theory of leadership.

Qualitative interpretations of the simulations that were constrained by behavior prescriptions clearly demonstrate that if the affective meaning of identities differs cross-culturally, behavior prescriptions that support interactants in one culture will disturb the maintenance of their professional identities in another culture. The effect on successful leadership behavior is very different in both cultures. The behavior prescriptions that supported the U.S. manager and advisor in their professional interaction, proved to be disastrous for the German interactants, who by language translation have the same professional identity as their U.S. colleagues but differ in their affective meaning of their identities.

Discussion

Laypersons and researchers are often mislead to assume global similarities when they see homogenized cathedrals of consumption all around the globe (Ritzer 1999; 2000). People still attach their culture-specific meaning to global representation of worldwide corporations like Disney (Bryman 1999; Van Maanen & Kunda 1989). As it became painfully clear in the case of Euro Disney in France, people will act upon their culture-specific meanings.

Many aspects of modern life became increasingly globalized (Giddens 1990; 1991). However, we achieved less globalization of culture than we might assume when judging from the global representation of some multinational corporations. As Giddens (2000) points out in his most recent work, globalization also creates new pressures for local autonomy. This pressure in turn facilitates cultural diversity. It sounds paradoxical, but in this way,

'globalization is the reason for the revival of local cultural identities' (Giddens 2000: 31) such as gender or ethnic identities. Within North America, organizations like the military already had painful legal experiences violating attitudes of different gender and ethnic sub-cultures. Other corporations were more proactive in their consideration of cultural and sub-cultural differences.

As an effective method to work with cultural or sub-cultural differences, the author suggests to focus on affective meaning (psycholinguistic translation) instead of cognition. Not only is affective meaning most central to the decision-making process, it spares entanglement in complicated cross-cultural or sub-cultural differences in denotation and language. Affect is introduced into the investigation of organization behavior with methods just as rigorous as the methods used in traditional work based on cognitive meaning.

There is a powerful instrumentation available for working with affective meanings. In one of the largest studies in social science, Charles Osgood created culturally universal semantic differential scales. His scales were used and tested in more than 45 different cultures. These scales differentiate to an extent that even small sub-cultural nuances in affective meaning can be identified. Dictionaries of affective meaning already exist for North America, Canada, Germany, and Japan. Dictionaries that are more exhaustive would allow the simulated events to be more specific and the interpretation to be less general. Larger dictionaries would improve the identification of cross-cultural differences, the cross-cultural translation of management strategies based on affective meaning, and the methodological instrument of behavior simulations. Ratings of affective meaning taken from college students are a good

representation of the general cultural attitudes of a society, and therefore provided a valid basis for my cross-cultural comparison. A more applied analysis in a specific multicultural corporation, however, would highly benefit from data reflecting different sociodemographic statuses and subcultures.

Computer simulations based on affect control theory are only one part of the methodological toolbox available in the research with affective meaning. For a far-reaching decision like the elimination of behavior descriptions, a multi-method approach should be used in the investigation. Dictionaries listing the affective meaning of identities and behaviors can be analyzed for systematic cross-cultural differences in affective meaning. In this way, areas of potential cultural misunderstandings can be identified. Using data on affective meaning, Schneider (1999b) demonstrated that differences between North America and Germany are located in areas such as authority. Differences found in this work were very much in line with the cross-cultural differences found in much more expensive studies like Inglehart's world value survey, or the IBM survey used by Hofstede.

Confirmative cluster analysis can be used to indicate classes of affective meaning, like structural meanings (e.g., authority or family), that are shared across cultures or that are unique to cultures (Schneider 1999a). The common components of shared structural meanings can then be used for the systematic comparison of affective meaning with correlation analysis, analysis of variance (Schneider 1996), and of course, computer simulations. For the simulations presented here, results of a cluster analysis and a comparison of common components of the U.S. and German clusters were used to locate hotspots of cultural

disagreement. The hotspot of the authority concept appeared to be interesting to be investigated in the context of international corporations. Pinpointing the cultural differences in the authority domain, methods using affective meaning were very much in line with the extensive international studies. This is true for the IBM studies of 1968 and 1972, analyzed by Hofstede, and contemporary studies, like the world value survey conducted by Inglehart. Investigating the maintenance of professional identities cross-culturally, computer simulations went beyond locating cross-cultural differences.

Cross-cultural application of computer simulation, based on affective meaning, demonstrated the methodological feasibility of working with affective meaning within settings of multinational corporations. The example of U.S. versus German culture simulations was chosen to illustrate the potential disturbance in the maintenance of professional identities if behavior is prescribed globally without taking the differences of affective meaning in professional identities and behaviors into account. Interpretations of the simulations, based on different leadership models, supported two hypotheses. Unconstrained by behavior prescriptions, interactants in both cultures were able to support their professional identities. When behavior prescriptions of correcting and disciplining were introduced, only the U.S. managers were able to maintain professional identities suitable for a corporate framework. Following the same behavior prescriptions, German managers turned into deviants.

The interpretation of the simulations suggests the elimination of unified behavior prescriptions in multinational corporations, at least as long they have not been tested for their affective meaning. Based on the simulations it can be further speculated that managers who

spoil their images by following official, but culturally inappropriate, behavior guidelines are likely to counterbalance negative effects with informal, culturally appropriate behavior. If these deviations are discovered in their organization, the ineffectiveness of globally implemented prescriptions might then be attributed not to the problematic behavior prescription itself, but to the inaccuracy these prescriptions followed. In such a case, it is quite likely that additional prescriptions are issued, more intense supervision is implemented, and more severe sanctions for digressions from prescribed behavior are administered. Instead of using the strong structuring effect of professional identities, a vicious circle of deviant behavior is created.

The author does not suggest that based on the simulations presented here, multinational corporations should instantly eliminate culture-centric behavior prescriptions. To test the question of whether behavior prescriptions should be dropped altogether, more data should be collected. The efficiency expected by eliminating behavior prescriptions and the potential risks involved with this endeavor would certainly justify a new data collection of larger dictionaries.

Just as the affective 'gut behavior' of a manager can be interpreted ex post facto in terms of rational explanations, traditional management theories are able to explain theoretically simulated results of ACT. Describing behavior in terms of its affective components and its language-based cognitive rules is looking at two sides of the same coin. Which of the two sides of the coin should we choose? One can argue that the more complex the situation, the more persuasive is the affective side of the coin. Rising multi-culturalism in corporations increases the complexity of behavior decisions and makes the affective basis of behavior more

compelling for future research.

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Table 1. Impression-Formation Equations in INTERACT: Coefficients for Predicting In-Context Impressions of Evaluation, Potency, and Activity for the Actor, Behavior, and Object from Out-of-Context Impressions.

	Ae'	Ap'	Aa'	Be'	Bp'	Ba'	Oe'	Op'	Oa'
Constant	-0.101	-0.175	0.048	-0.105	-0.044	-0.004	0.045	-0.484	-0.095
Ae	0.468	-0.077	0.062	0.071	0.042	0.047	0.022	0.010	0.002
Ap	-0.015	0.609	-0.062	0.019	0.155	-0.062	0.019	-0.087	-0.007
Aa	-0.015	0.076	0.786	-0.001	0.023	0.344	-0.023	0.018	-0.014
Be	0.425	-0.151	-0.078	0.571	-0.176	-0.037	0.123	0.146	0.036
Bp	-0.069	0.507	0.076	-0.095	0.757	0.121	-0.033	-0.106	-0.034
Ba	-0.106	-0.053	0.294	-0.116	-0.014	0.720	-0.013	0.070	0.060
Oe	0.055	0.044	-0.003	0.035	0.024	0.021	0.622	-0.154	0.034
Op	-0.020	-0.047	-0.008	-0.032	-0.036	-0.048	-0.021	0.677	-0.053
Oa,	-0.001	0.006	-0.035	-0.003	0.011	0.040	0.008	0.094	0.791
Ae,Be	0.048	-0.005	-0.002	0.015	0.005	-0.012	0.038	0.014	0.008
Be,Oe	0.130	0.008	-0.007	0.116	0.012	-0.001	0.044	0.031	0.021
Ap,Bp	0.027	-0.094	0.011	-0.009	-0.030	-0.014	0.002	0.043	0.020
Bp,Op	0.068	-0.016	0.012	0.071	0.003	0.044	-0.018	-0.064	0.014
Aa,Ba	0.007	-0.001	-0.072	-0.012	-0.003	-0.012	0.025	-0.022	0.004
Ae,Bp	-0.038	0.023	0.000	0.025	-0.026	-0.014	-0.009	0.021	-0.008
Ae,Ba	-0.010	-0.001	-0.001	0.015	-0.024	-0.019	0.005	-0.003	-0.011
Ap,Be	0.013	0.049	-0.012	0.021	0.013	0.009	-0.019	0.000	-0.007
Ap,Oa	-0.014	0.042	-0.006	-0.019	0.018	0.006	0.006	0.021	0.025
Be,Op	-0.058	-0.017	-0.003	-0.052	0.002	-0.019	0.014	0.036	0.000
Bp,Oe	-0.070	0.009	0.002	-0.034	0.005	-0.016	-0.037	-0.011	-0.016
Bp,Oa	-0.002	0.047	0.046	0.011	-0.005	-0.003	-0.034	-0.012	0.018
Ba,Oe	0.010	-0.007	0.004	-0.011	0.001	0.004	0.014	0.054	0.029
Ba,Op	0.019	0.012	-0.004	0.036	0.008	-0.028	0.033	0.020	-0.008
Ae,Be,Oe	0.026	0.011	0.000	0.021	0.008	0.002	0.012	0.003	0.001
Ap,Bp,Op	-0.006	0.028	0.023	-0.031	-0.003	0.019	0.000	-0.021	-0.024
Aa,Ba,Oa	0.031	-0.027	0.001	-0.003	0.000	-0.024	-0.011	0.018	0.017
Ae,Bp,Op	0.033	-0.004	0.007	0.018	-0.004	0.005	0.001	0.003	-0.001
Ap,Bp,Oa	0.018	-0.028	-0.032	0.012	0.020	0.013	0.011	-0.037	-0.034

Table 2: Constrained and Unconstrained Experimental Designs of the Simulations and their Control Conditions.

Interaction Type	First Event	Following Events		
	Choice of initial Identity	Choice of behavior	Identity change	Actor-object constellation
Unconstrained by Behavior	theoretical	simulated	simulated	simulated, then theoretically selected for comparison
Constrained by Behavior	theoretical	theoretical: to correct to discipline	simulated	simulated, then theoretically selected for comparison

Figure 1: American unconstrained interactions

event #1

	Actor	Object	Behavior
	advisor	manager	caution
Fundamental Sentiment	1.0 1.3-0.7	0.6 1.3 0.1	1.4 0.8-0.9
Present Transient	1.0 1.3-0.7	0.6 1.3 0.1	1.4 0.8-0.9
New Transient	0.9 0.8-0.7	0.5 0.6-0.1	0.9 0.6-0.8

Actor	New Identity	1.4	0.2	-0.8	farmer
Object	New Identity	1.0	-1.1	0.2	innocent

event #2

	Actor	Object	Behavior
	manager	advisor	uplift
Present Transient	0.5 0.6-0.1	0.9 0.8-0.7	1.6 1.2-0.1
New Transient	0.8 0.6 0.0	0.7 0.2-0.5	0.9 0.8-0.1

Actor	New Identity	1.8	0.9	0.2	intimate
Object	New Identity	1.3	-1.1	0.4	innocent

event #3

	Actor	Object	Behavior
	advisor	manager	explain something to
Present Transient	0.7 0.2-0.5	0.8 0.6 0.0	1.6 1.6-0.7
New Transient	0.9 0.5-0.4	0.6 0.1-0.0	1.0 1.0-0.5

Actor	New Identity	1.7	1.2	-0.5	gentleman
Object	New Identity	1.6	-1.2	0.3	innocent

event #4

	Actor	Object	Behavior
	manager	advisor	congratulate
Present Transient	0.6 0.1-0.0	0.9 0.5-0.4	1.6 1.6 0.2
New Transient	0.7 0.5 0.2	0.7 0.0-0.2	0.9 1.0 0.2

Actor	New Identity	1.7	1.3	0.5	lover
Object	New Identity	1.5	-1.1	0.5	innocent

Figure 2: German unconstrained interactions

Individual: Manager Culture: GERMANY Subgroup: Male

event #1

	Actor	Object	Behavior
	Manager	Advisor (Berater)	extol (rühmen)
Fundamental Sentiment	-0.3 1.6 1.7	1.3 0.8-0.5	0.6 0.9 1.3
Present Transient	-0.3 1.6 1.7	1.3 0.8-0.5	0.6 0.9 1.3
New Transient	-0.3 1.2 1.3	0.7-0.0-0.3	0.1 0.8 1.2
Actor New Identity	0.3 0.7 1.3	Insider	
Object New Identity	0.2 -0.9 0.5	sophomore (Erstsemester)	

event #2

	Actor	Object	Behavior
	Advisor (Berater)	Manager	inform (informieren)
Present Transient	0.7-0.0-0.3	-0.3 1.2 1.3	1.5 0.5-0.1
New Transient	0.6-0.1-0.2	-0.1 0.7 0.8	0.7 0.2-0.1
Actor New Identity	1.0 -0.0 -0.0	neighbor (Nachbar)	
Object New Identity	1.6 -1.1 0.2	innocent (Unschuldiger)	

event #3

	Actor	Object	Behavior
	Manager	Advisor (Berater)	contradict (widersprechen)
Present Transient	-0.1 0.7 0.8	0.6-0.1-0.2	0.1 1.4 1.6
New Transient	-0.5 0.8 1.1	0.3-0.6-0.1	-0.3 1.1 1.3
Actor New Identity	-0.4 1.1 1.5	car driver (Autofahrer)	
Object New Identity	-0. 3-0.8 0.7	gambler (Spieler)	

event #4

	Actor	Object	Behavior
	Advisor (Berater)	Manager	suggest (empfehlen)
Present Transient	0.3-0.6-0.1	-0.5 0.8 1.1	1.9 1.1-0.2
New Transient	0.5-0.2 0.0	-0.2 0.5 0.7	0.8 0.4-0.1
Actor New Identity	1.5 0.6 -0.1	coworker (Mitarbeiter)	
Object New Identity	2.2 -1.2 0.2	innocent (Unschuldiger)	

Figure. 3: American interactions constrained by behaviors. *Correct* and *discipline* are implemented for the *manager*.

Individual: Manager Culture: USA Subgroup: Male

event #1 _____

	Actor	Object	Behavior
	manager	advisor	correct
Fundamental Sentiment	0.6 1.3 0.1	1.0 1.3-0.7	0.4 0.8 0.7
Present Transient	0.6 1.3 0.1	1.0 1.3-0.7	0.4 0.8 0.7
New Transient	0.1 0.9 0.4	0.6 0.2-0.6	0.1 0.7 0.4

Actor New Identity 0.0 0.5 0.8 evangelist
Object New Identity 0.0 -0.8 0.5 bumpkin

event #2 _____

	Actor	Object	Behavior
	advisor	manager	instruct
Present Transient	0.6 0.2-0.6	0.1 0.9 0.4	1.5 1.4-0.5
New Transient	0.6 0.5-0.4	0.2 0.3 0.2	0.7 0.9-0.4

Actor New Identity 1.4 1.0 -0.4 scoutmaster
Object New Identity 1.5 -1.2 0.4 innocent

event #3 _____

	Actor	Object	Behavior
	manager	advisor	discipline
Present Transient	0.2 0.3 0.2	0.6 0.5-0.4	0.2 1.3-0.4
New Transient	-0.1 0.6 0.2	0.3-0.4-0.3	-0.0 1.0-0.0

Actor New Identity -0.1 1.0 -0.2 sophisticate
Object New Identity -0.4 -0.9 0.3 urchin

event #4 _____

	Actor	Object	Behavior
	advisor	manager	explain something to
Present Transient	0.3-0.4-0.3	-0.1 0.6 0.2	1.6 1.6-0.7
New Transient	0.6 0.2-0.3	0.0 0.1 0.1	0.8 0.9-0.4

Actor New Identity 1.5 1.2 -0.5 scoutmaster
Object New Identity 1.7 -1.4 0.3 innocent

Figure 4: German interactions constrained by behaviors. *Correct* and *discipline* are implemented for the *manager*.

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event #1

	Actor	Object	Behavior
	Manager	Advisor (Berater)	correct (korrigieren)
Fundamental Sentiment	-0.3 1.6 1.7	1.3 0.8-0.5	0.1 0.9-0.5
Present Transient	-0.3 1.6 1.7	1.3 0.8-0.5	0.1 0.9-0.5
New Transient	-0.4 1.3 1.1	0.7-0.2-0.4	-0.1 0.8 0.2

Actor	New Identity	-0.2 0.5 -0.3	bohemian (Boheme)
Object	New Identity	-0.2 -1.4 -0.0	egghead (Eierkopf)

event #2

	Actor	Object	Behavior
	Advisor (Berater)	Manager	commend (empfehlen)
Present Transient	0.7-0.2-0.4	-0.4 1.3 1.1	1.9 1.1-0.2
New Transient	0.7 0.0-0.2	-0.1 0.8 0.7	0.9 0.5-0.2

Actor	New Identity	1.6 0.4 -0.1	coworker (Mitarbeiter)
Object	New Identity	2.0 -1.0 0.3	innocent (Unschuldiger)

event #3

	Actor	Object	Behavior
	Manager	Advisor (Berater)	discipline (disziplinieren)
Present Transient	-0.1 0.8 0.7	0.7 0.0-0.2	-1.2 0.9 0.5
New Transient	-1.0 0.8 0.8	0.2-0.9-0.2	-1.0 0.9 0.6

Actor	New Identity	-1.5 0.8 0.5	adulterer (Ehebrecher)
Object	New Identity	-0.9 -1.2 0.3	egghead (Eierkopf)

event #4

	Actor	Object	Behavior
	Advisor (Berater)	Manager	talk to (ansprechen)
Present Transient	0.2-0.9-0.2	-1.0 0.8 0.8	1.0 0.5 0.3
New Transient	0.1-0.5 0.1	-0.6 0.3 0.5	0.3 0.1 0.2

Actor	New Identity	0.4 0.0 0.4	eyewitness (Augenzeuge)
Object	New Identity	1.3 -1.4 0.2	innocent (Unschuldiger)
