

CIES e-Working Paper N.º 175/2014

SOCIAL RULE SYSTEM THEORY: Universal Interaction Grammars

Tom R. Burns with Nora Machado

Tom R. Burns (associated with Sociology at Uppsala University, Sweden and Lisbon University Institute, Portugal) has published internationally more than 15 books and 150 articles in substantive areas of governance and politics, environment and technology, administration and policymaking; also he has contributed to institutional theory, sociological game theory, theories of socio-cultural evolution and social systems. He has been a Jean Monnet Visiting Professor, European University Institute, Florence (2002), Fellow at the Swedish Collegium for Advanced Study (1992, 1998) and the Wissenschaftszentrum Berlin (1985) and a visiting scholar at a number of leading universities in Europe and the USA.

Nora I. Machado des Johansson is a researcher associated with the Center for Research and Studies in Sociology CIES, at the Lisbon University Institute (ISCTE), and to the Department of Sociology, University of Gothenburg in Sweden. Machado's main areas of research are sociology of culture, social cognition and organization. Her studies also concern the sociology of ethics. Among her publications are articles in Public Administration: An International Quarterly, Canadian Journal of Sociology, Social Science and Medicine, Death Studies, Human Systems Management and a book Using the Bodies of the Dead: Legal, Ethical and Organizational Dimensions of Organ Transplantation. Ashgate Publishers, England 1998. She is now currently completing a book about normative and cultural changes in end-of-life processes.

ABSTRACT

Rule system theory has been used in conceptualizing interaction grammars as rule regimes. Such grammars are complexes of rules applying to social action and interaction of individuals, groups, and organizations. They consist of a finite and universal set of rule categories (10) that are identified in the paper and concern five key factors in social life: group agency conditions, social structure, interaction, material conditions, and time and space. A rule regime, while an abstraction, is carried, applied, adapted and transformed by concrete human agents, who interact, exchange, struggle, and exercise power in their social contexts, in large part based on the rule regimes which they maintain, adapt, or transform.

Keywords: Interaction grammars, rule system theory, coordination, cognition and understanding, account-giving

1. Background

Most human social activity – in all of its extraordinary variety – is organized and regulated by socially produced and reproduced rules and systems of rules (Burns and Flam, 1987; Giddens, 1984; Harré, 1979). Such rules are not transcendental abstractions. They are embodied in groups and collectivities of people – in their language, customs and codes of conduct, norms, and laws and in the social institutions of the modern world, including family, community, market, business enterprises and government agencies. The making, interpretation, and implementation of social rules are universal in human societies, as are their reformulation and transformation. Human agents (individuals, groups, organizations, communities, and other collectivities) produce, carry, and reform these systems of social rules, but this frequently takes place in ways they neither intend nor expect.

Social rule systems play a key role on all levels of human interaction (Burns et al, 1985; Burns and Flam, 1987; Burns and Hall, 2012; Giddens, 1984; Goffman, 1974; Harré, 1979; Lotman, 1975; Posner, 1989, among others), producing potential constraints on action possibilities but also generating opportunities for social actors to behave in ways that would otherwise be impossible, for instance, to coordinate with others, to mobilize and to gain systematic access to strategic resources, to command and allocate substantial human and physical resources, and to solve complex social problems by organizing collective actions.

In guiding and regulating interaction, the rules give behavior recognizable, characteristic patterns² – making the patterns understandable and meaningful for those sharing in the rule knowledge. Shared rules are the major basis for knowledgeable actors to derive, or to generate, similar situational expectations. They also provide a frame of reference and categories, enabling participants to readily communicate about and to analyze social activities and events. In such ways, uncertainty is reduced, predictability is increased.

This is so even in complex situations with multiple actors playing different roles and engaging in a variety of interaction patterns. As Harré and Secord (1972:12) pointed out, "It is the self-monitoring following of rules and plans that we believe to be the social scientific analogue of the working of generative causal mechanisms in the processes which produce the non-random patterns studied by natural scientists."

On the macro-level of culture and institutional arrangements, we speak of rule system complexes such as the language, cultural codes and forms, shared paradigms, norms and "rules of the game". On the actor level these translate into roles, particular norms, strategies, action paradigms, and social grammars (for example, procedures of order, turn-taking and voting in committees and democratic bodies). Social grammars of action are associated with culturally defined institutional domains and roles, indicating particular ways of thinking, judging, and

¹ Social rule system theory (Burns et al, 1985, Burns and Flam, 1987) was formulated and developed in the 1980s making a modest contribution to the new institutionalism (Powell and DiMaggio, 1991).

² To varying degrees actors collectively produce and reproduce patterns of appropriate or acceptable possibilities. This can be conceptualized and mathematically developed as an ideal point or collection of "approximations". Thus, a community of actors sharing a rule complex recognize a wide variety of varying performances of a given rule as a family of resemblances, or "the same thing." (Burns and Gomolinska, 2000). Both in this sense – and in the sense that social rules are never learned identically and undergo different rates of adaptation and change over time – our concept of rule, and of culture generally, is distributive.

³ Lotman (1975) and Posner (1989) offer valuable semiotic perspectives with important (not yet analyzed on our part) parallels.

⁴ There are not only role grammars but semantics and pragmatics, hence processes of meaning, interpretation, and adaptation associated with rule application and implementation.

acting. For instance, in the case of gift giving or reciprocity in defined social relationships, actors display their social and cultural competence in knowing when and to whom a gift should be given or not, how much it should be worth, or, if one should fail to give it or if it lies under the appropriate value, what excuses, defenses and justifications might be acceptable. Someone ignorant of these rules, e.g. a child or someone from a totally different culture would obviously make (excusable) mistakes. Similarly, in the case of "making a promise," rule knowledge indicates under what circumstances a promise may or may not legitimately be broken — or at least the sort of breach of a promise that might be considered acceptable.

Social rule systems play then an important role in cognitive processes, in part by enabling actors to organize and to frame perceptions in a given institutional setting or domain. On the basis of a more or less common rule system, key, interaction-enabling questions can be intersubjectively and collectively answered: what is going on in this situation; what kind of activity is this; who is who in the situation, what specific roles are they playing; what is being done; why is this being done? The participating actors – as well as knowledgeable observers – can understand the situation, even simulate and predict what will happen in the interactions on the basis of the applied rules. In this sense, rule-based paradigms supply interpretative schemes but also the concrete basis for actors to plan and judge their actions and interactions. The cultural complex of rule systems contributes to making social life more rather than less orderly and predictable – it solves problems of "existential uncertainty" within the group or community bearing and adhering to the culture (Burns and Dietz 1992; Burns and Flam 1987; Giddens, 1984), although the tension between the regulated and unregulated, order and disorder remains.

Finally, social rules are also important in normative and moral communications about social action and interaction. Participants refer to the rules in giving accounts, in justifying or criticizing what is being done (or not done), in arguing for what should or should not be done, and also in their social attribution of who should or should not be blamed for performance failures, or credited with success. Actors also exploit rules when they give accounts in order to try to justify certain actions or failures to act, as part of a strategy to gain legitimacy, or to convince others that particular actions are "right and proper" in the context.

In the social science literature a standard distinction is made between formal and informal rules. Formal rules are found in sacred books, legal codes, handbooks of rules and regulations, or in the design of organizations or technologies. Informal rules, in contrast, are generated and reproduced in ongoing interactions – they appear more spontaneous, although they may be underwritten by iron conduct codes. The extent to which the formal and informal rule systems diverge or contradict one another varies. Numerous organizational studies have revealed that official, formal rules are seldom those that operate in practice (Burns and Flam 1987). More often than not, the informal unwritten rules not only contradict formal rules but take precedence over them, governing organizational life.

One of the contributions of rule system theory was in conceptualizing universal interaction grammars (Burns and Flam, 1987). Such grammars are complexes of rules applying to social action and interaction of individuals, groups, and organizations. These grammars consist of a finite set of rule types or categories that are identified in section 2.⁵ A rule regime,

3

_

⁵ The determination of the universal rule categories for groups, diverse social organizations, and institutions was based on: (1) language categories that are reflected in "questions" and definitions/descriptions of socially regulated interaction situations: who, what, for what, how, where, when (Burns et al, 1985; Burns and Flam (1987); (2) interaction descriptions and analysis (and

while an abstraction, is carried, applied, adapted and transformed by concrete human agents, who interact, exchange, struggle, and exercise power within the group, in large part based on the rule regime which they maintain, adapt, or transform.

2. Universal Interaction Grammars.⁶

Rule system theory has identified and applied universal rule grammars – in a comparative perspective – to human interaction and games as well as diverse institutions and institutional arrangements: bureaucracies, judicial systems, markets, democratic associations, etc.⁷

The conceptualization of universal interaction grammars enables us to systematically investigate and analyze group and organizational structures, interaction situations and performances, which rule regimes socially defined and regulated – and to do this comparatively -- as one would compare the grammars of different languages. This is done in Burns and Flam (1987) in terms of defining social relationships and interaction patterns of diverse institutions.⁸

Rules and rule systems serve three (at least) basic functions/uses in all social life: (1) coordination/direction of social action and interaction; (2) understanding/simulation of what is going on or will go on in the future, and (3) referents in giving and asking for accounts, generating normative discourses, for instance of praise and of critique.

The rules making up rules regimes consists of three qualitatively different kinds: descriptive or declarative rules describing or defining reality, action or directive/regulative rules, and evaluative rules defining what is worth-while, good, valuable (or their opposites, "bads").

Rule system theory provides a model which identifies key specific rule categories which underlie or, when enacted, generate particular group or organizational properties: the rules concern a group's particular participants and their relations and social structure, its times and places, its values and goals, its activities and procedures and productions, its materials and technologies used in group activities and productions (see Figure 1). They concern the finite and universal rule base of group social action and interaction, its material, social structural, and agential conditions.

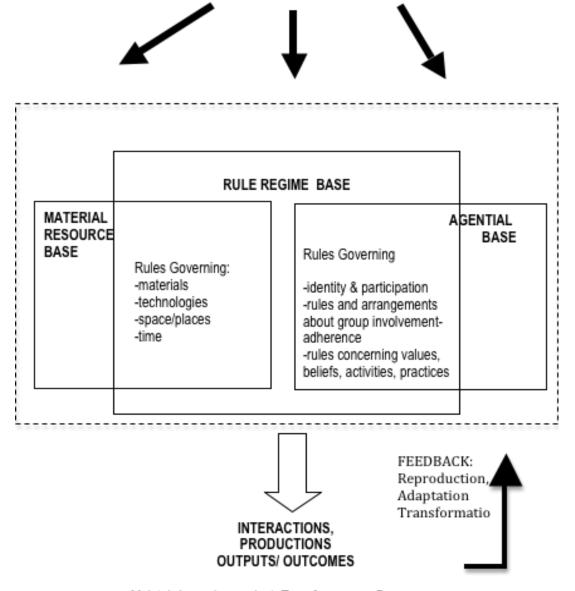
contextualized games, C-games) (Burns and Gomolinska, 2000; Burns and Roszkowska, 2005, 2007, 2008; (3) comparative institutional analysis (Burns and Flam, 1987).

⁶ The focus here is on relational and organizational grammars. There are other types of social grammars such as those of language and money (Burns and DeVille).

⁷ Although the focus of the research is on modern social organizations, the theory is applicable to families, clans, communities, etc. The theoretical and empirical research clearly demonstrated that there was no scale problem.

⁸ In the sociological game theory work of Burns and Gomolinska (2000), Burns, Gomolinksa, and Meeker (2001), and Burns and Roszkowska (2005, 2007, 2008), games and established interaction settings are characterized and distinguished in terms of their particular grammars – grammars which allow one to predict the interaction patterns and equilibria of interaction settings and games.

SOCIAL AND ECOLOGICAL CONTEXTS



- Maintain/reproduce, adapt, Transform group Bases
- Realize values, purposes, demands—or failure
- Conduct enforcement and governance, specified in the regime; Resolve conflicts—or failure
- Deal with environment issues and agents—or failure

Figure 1: Social Organizational Bases and Their Interactions and Productions⁹

⁹

⁹ An earlier model of group or social system functioning was formulated by Talcott Parsons (195X): the well-known AGIL model which specified (1) economic and material production or "adaptation" (A), (2) goal-orientation which entailed group or social system selection of goals and values, (3) integration or group maintenance (I) and cultural and rule patterns, or "latency" (L). A more abstract model of "self-reproducing automata" was formulated by von Neumann (19XX). It had only two or possibly three

In the model of group and organizational rule regimes, ten (10) categories of rules are identified (see Tables 1 and 2) concerning group agency conditions, social structure, interaction, material conditions, and time and space: A. Four categories concern agency relating to: Identity (I), Group membership (II), Share values, ideals, and goals (III), and Shared knowledge and beliefs (IV); B. Group social relations and structure (category V); C. Group action and interaction orders/patterning (VI, VII, VIII); D. Material and resource conditions of group action and interaction (IX); and E. Rules relating to group times and space conditions for the group to meet and interact.¹⁰

Table 1: Key Types of Rule Categories Specifying Group Conditions, Structures, and Processes

Type I. Identity rules – "Who are we?" "What symbolizes or defines us?"

Type II. Membership, Involvement, and Recruitment Rules – "Who belongs, who doesn't?" "What characterizes members?" "How are they recruited?"

Type III. Rules concerning shared value orientations and ideals – "What does the group consider good and bad?"

Type IV. Rules concerning shared beliefs and models – "What do we know and believe about ourselves, our group behavior, and our environment."

Type V. Social relational and structural rules. "How do we relate to one another, what is our social structure?" "What are the authority and status differences characterizing the group?" "How do we interact and reciprocate with one another and with the leadership?"

Type VI. Procedures and production rules. "What are our characteristic activities, practices, production programs, ceremonies and rituals?" "How do we coordinate activities and make collective decisions?"

Type VII. Rules for dealing with environmental factors and agents. "How do we cope with, make gains in the environment, dominate, or avoid environment threats?"

Type VIII. Rules for changing core group bases, in particular the rule regime itself. "How should we go about changing group structures and processes, our goals, or our practices"?

Type IX. Technology and resource rules. "What are appropriate technologies and materials we should use in our activities (and possibly those that are excluded)?"

Type X. Time and Place Rules – "What are our appropriate places and times?"

production functions: manufacturing, copying, and reading and implement the rule regime (or code book) together with structural features, the "codebook" possibly corresponding to Parsons' Latency function. Neither had resources and the natural environment as a factor. Parsons gives more attention than von Neumann to "change". Parsons has an explicit "adaptation" function as well as "goal-orientation" to make shifts . Von Neumann has a system designed to follow a fixed codebook, but then he was concerned with modeling reproduction.

¹⁰ Rules and rule regimes need not be explicit buy may be tacit, or partially tacit. At the same time, group members and outsiders may have misconceptions about the rules and their application. Thus, group members may deceive themselves and others about what rules they are applying and what they mean in practice, deception may be institutionalized in the form of ready-made discourses defining or explain a regime as just or efficient or optimal – for example, a market regime – when it is not. Members as well as outsiders may see what they have been led to see and understand.

Below we present in more detail these universal rule types/categories (10) that make up a group or organizational rule regime. This regime is a cognitive-normative framework defining among other things group identity, its purposes, structural architecture, role relations including status and authority relations, groups divisions, procedures, characteristic activities, and patterns of interaction and production/outputs. The regime may be understood as consisting of a collective codebook, cultural tools & social organizational principles. There is a architecture of any rule regime, the cognitive-normative basis of the formation and functioning any group or organization.

Table 2. Universal rule categories of social group and organizational rule regimes 12

TYPE OF RULE	FUNCTION	COMMENTS
IA. Group or Common Identity Rules: Who are we? And How are we identified?	Name & naming the group	The group shares a rule(s) about what the group is to called, often also share rules about elaborating names and being sure to use names distinguishing it from other groups
IB. Group or Common Identity Rules:	Defining and regulating right and proper group symbols, dress, shoes, food, drink, etc.	Symbols including hats, hairstyles, beard styles, shoes, clothing; foods, also associated
Who are we and how are we identified – to ourselves and possibly to others (some groups have rules of secrecy so that they cannot be identified by external agents).	Also specifying the performance of rituals characteristic of the group – either individually or collectively performed	with particular interaction patterns and rituals; and possibly the regime itself. Some groups do not identify themselves by their clothing, food, etc. but their membership in a group with a particular name.
II. Membership & participation/involvement rules	Rules concerning inclusion/exclusion – also recruitment and removal/exit. In the universe of possible participants, only those in a certain subpopulation or category may join and participate. Up to	Of course, recruitment may be discriminatory based on religion, class, gender, age, education
Who belongs and doesn't belong? Group recruitment pattern of persons who fit group identity, level of	the 19 th – and well into the 20 th century in many societies – women were not allowed to be "citizens" with the right to vote or hold public office. They were not allowed to be ministers and still are not allowed to be priests in the Catholic Church.	
expected adherence and involvement, and tasks to be performed	Group norms define roughly the appropriate level of commitment to or involvement in the group that membership should have or exhibit in general as well as in particular activities. ¹³ Those belonging to the group or organization are expected (should) involve themselves to an appropriate degree and in expected ways – specified by group rules	
III. Shared Value orientations & ideals and goals. What does the group consider good and bad? What does it stand for?	These rules define relevant values, purposes, and priorities regarding group activities as well as outcomes and developments. Appropriate values for the group: concerning group relations, relative value of in-group and others, spirituality and the sacred. Distributive justice rules, for instance, rewards/payments and penalties for collective and individual performances with respect to general value as well as role performance.	Value(s) like that of creativity or of money are expressions of the group's ability to command proper orientations and obedience. Group values as socially precious or sacred objects through time.

_

¹¹ This is not a "laundry list", hence our emphasis on the structure or *architecture* rule regimes (Carson et al, 2009). The specification and analysis of rule complexes making up architectures goes back more than 20 years and was the basis of a reconceptualization of the theory of games and human interaction, a sociological theory of games (Burns and Gomolinska, 2000; Burns, Gomolinksa, and Meeker (2001), and Burns and Roszkowska (2005, 2007, 2008, among other articles).

¹² Talcott Parsons (1951) proposed universal "pattern variables" (for instance, univeralism vs particularism, affective neutrality vs affectivity; achievement versus ascription, collectivity vs self, specificity vs diffuseness). Other conceptions of universal social organizational dimensions are: hierarchy, degree of institutionalization and degree of formalization. While all of this is compatible with the rule regime concept, rules, rule complexes, and rule regimes as well as rule regime formation and transformation are, in our view, more fundamental concepts in the social sciences.

¹³ This applies even in the activities of "fun and games". Participants may be criticized if they do not engage appropriately, either "not trying hard enough" or exhibiting "over-enthusiasm" or "inappropriate competitivity."

IV. Shared belief/model rules How do we view ourselves and the	Shared group beliefs/models of appropriate or relevant "situations", definitions of the situation, causality, and causal attribution.	Shared beliefs/models are expressions of the group's ability to command proper orientations
world, our cognitive orientations, distinctions and models of causality and dealing with causal forces?	Framing and conceptualizing types of problems and their causes and solutions. Problem solving rules and algorithms (the right means to deal with the problems). For instance, making	and obedience
What are our beliefs about our powers and capabilities vis-à-vis others?	distinctions about outside groups, dividing them into "races", attributing to them properties and potentialities/capabilities.	
V. Social relational and structural rules	Rules of position define roles and appropriate role occupants and role relationships including control relationships	Roles are not only "internal". In some groups, the same person may play multiple roles, e.g.
How do we relate to one another? What is our internal order?	Rules define authority & leadership rights as well as property rights (ownership rules) – what the group owns or control and who decides over their allocation. ¹⁴	internally in leading the group and resolving conflicts and externally in negotiations or in cooperation or conflict (see IX
	Relations of the group and individual members of possessions (property). What may actors do or not do with group and individual property in the group context. Group may appropriate individual's property. Or individual retains rights to certain properties. In general, a groups has a subcomplex of rules relating to what actors may or may not do, must do, or are forbidden to do with the possessions in the group context, for instance a particular property may or may not be permissible in the group context, or it may not be sold or transferred to outsiders, or it may be transferred only after a collective decision. ¹⁵	below).
	Group norms define appropriate emotions for relationships, for instance, the degree of respect or obsequiousness, emotional control vis-à-vis a group leader, someone or something sacred to the group, toward group members and outsiders.	
VI. Production and procedural rules/algorithms What are our characteristic practices, production activities, our ceremonies and rituals?	Rules define what are right and proper activities for the group and group members to engage in. Members might be expected to cooperate with one another generally or in particular areas of activity, to make "sacrifices" for the group, to demonstrate solidarity through actions for the group and its members.	Not all group activities are prescribed by the regime
	Production rules and processes in particular group situations, including internal governance and enforcement and sanctioning. Also, there are sub-complexes relating to structuring incentive arrangements for establishing and maintaining member involvement-adherence to the group, its leadership, and rule regime.	
	Communication rules, rules about scripts and discourses as well as rules about who may or may not initiate communication, or particular types of communications such as directives or evaluations	
	Procedures/algorithms for deliberating and deciding as a group, that is collective choices. ¹⁶ In what ways are collective judgments	

_

¹⁴ Concerning actors in their particular positions and the roles they play, those in positions of high status and power are allowed, even expected to act in particular ways, which are not permitted for subordinate or ordinary actors. Husbands in many "advanced countries" such as the USA had a right to physically punish their wives so long as "the rod was no thicker than a thumb." Women could not speak publicly – and, in particular, could not preach in most churches (which still obtains for most of the Jewish, Muslim, and Christian faiths).

¹⁵ Of particular importance in social life are *distributive rules* (Burns et al, 2014). Rules about appropriate/required/forbidden distribution of resources to actors in group situations, for instance rewards/payments and penalties for collective and individual performances. (1) with respect to general values and norms, laws and sanctioning; (2) with respect to role and sub-group performance.

performance.

16 Collective Choice Rules and procedures concerning the linking, coordinating, collectivizing of actions of the different actors:
(i) how roles are interlocked (as superordinate-subordinate interaction in Burns and Flam (1987); also, see Burns et al (1985) on

	and decisions to be made: through an authoritarian leadership, negotiation, democratic voting, etc. Rules for defining problems and problem-solution, resolving	
VII. Rules for dealing with factors and other agents in the environment	conflicts and accomplishing distributive justice. Group orientations and strategies derive from group beliefs and models about agents and factors in the environment. (this category is a particular category of group production rules)	Typically, one or more members deal with external groups and agents. The group may recruit a member to meet and negotiate with an external authority.
VIII. Rules for changing rules and group cores	Group values and beliefs enter in regulating change, innovation, creativity	
IX. Technology & resource rules What are the characteristic technologies and materials which we utilize? And those that are excluded?	Rules define necessary and appropriate technologies and resources for group activities. That is, there are appropriate/permitted/required/forbidden techniques and technologies as well as materials. For instance, the acceptable technologies used by physicians in dealing with their patients in particular areas of illness.	As indicated elsewhere in the text, the group either controls essential technologies and resources (for instance, through physical or ownership control, or must have access to and obtain them from external agents)
X. Time and place rules What are "our" places and times?	Rules define times and places for group activity or activities. ¹⁷ Appropriate times and situations for the group to be activated and functioning as "our group." Answers the question if a particular situation is one appropriate for group activity.	The group needs to have access to (rights, ownership, control) the places (and times) appropriate for group activities

Rules that are part of a group's rule regime are "known" (some or many possibly tacitly); they are normally useable/implementable or applicable (provided requisite technologies and resources are available to the actor(s); and are considered functional or appropriate (or legitimate, as rules in a regime are), hence the resource base as essential. A group's regime provides the cognitive-normative basis of members to coordinate with one another, to collaborate and exchange in particular ways; to understand what is going on in the group, to simulate groups interactions and developments, and to refer to in giving and asking for accounts and in making normative judgments, criticisms as well as eulogies.

The theory does not require that the participants in interaction are in agreement about the grammars (subcomplexes of the rule regime). Not only are agents in diverse roles expected to perform according to different grammars, but they may disagree and struggle over the appropriate grammars, the contents of particular categories of rules, or even details of a particular rule. As stressed in Burns and Flam (1987) (also see Burns and Hall, 2012), there is at one time or another a politics (or potential politics) to social rules (see next section), those rules that are supposed to apply generally as well as the rules associated with particular roles and role relationships.

The ten universal rule categories presented here may not be fully specified in all interaction situations. Typically, the process of "institutionalizing" a group or a complex of relationships entails a specification of the rules in the different categories. Long established – institutionalized – relationships usually have rules specified in all the categories. But this is an empirical question. Also, disruptions may occur as a result of political, economic, technological,

differing models of such relationships; (ii) ways in which collective judgments and decisions are to be made: negotiation, adjudication, democratic voting, etc.

¹⁷ These spatial or domain rules define: Where? Where not? For example, can one set up a market here? Or a public debate activity? Or is it reserved for religion. Many spaces are "zoned", defining the types of social and other activities such as economic activities which are permitted or forbidden. And there may be spaces defined as multi-functional but where the functional activities are differentiated in time. Time rules indicate when, when not? Or, when maybe? For instance, is the time appropriate for the group to engage in a religious, market or other type of social activity.

or other social transformations. Rules in particular categories that were taken for granted earlier may no longer be accepted or applied. Relationships which were hierarchical (with rule specifications appropriate to such relationships) are transformed into egalitarian relationships. Or the values and norms considered appropriate for particular relationships (whether in a family, religious community, work organization, political association) are transformed, shift, or are prioritized in radically different ways. Shifts in the rules of public policy paradigms governing areas of policy and regulation are investigated and identified in Carson et al (2009); the shifts concern values and goals, agents considered responsible, expertise, appropriate means, among other key rule changes.

Note: A rule regime does not necessarily consist of formal, explicit rules. It may be an implicit regime, which members of a group do not reflect upon (unless or until there is a crisis or performance failings, a "failed group experience"). The degree of institutionalization of the regime as well as its completeness are variables.¹⁸

3. Rule Processes

There is often a vigorous situational "politics" to establishing, maintaining, and changing social rules and complexes of rules. Actors may disagree about, and struggle over, the definition of the situation, and thus over which rule system(s) that should apply or how the rule system(s) should be interpreted or adapted in the situation. Actors encounter resistance from others when they deviate from or seek to modify established rules. This sets the stage for the exercise of power either to enforce rules or to resist them, or to introduce new ones.

Questions of power are central to our approach, since power struggles are about organizing and regulating major economic, administrative and political institutions. These struggles revolve around the formation and reformation of particular rule regimes defining the general organizing principles and rules, social relationships, role sets, rights and obligations, and the "rules of the game" in these domains. At stake is not only the power to change or maintain institutional arrangements, but also social, economic and political opportunities engendered by such arrangements.

Power struggles are only one source of rule system adjustment, reform and/or transformation which – as numerous projects carried out over years within the rule system research framework demonstrate - can happen for a number of different reasons:

- (i) Social situations in their continual flux and flow persistently challenge human efforts to regulate and to maintain order. The implementation of rules and the maintenance of some order always calls for cumulative experience, adjustment, adaptation in this way normative and institutional innovation is generated. There is a continual interplay a dialectic, if you will between the regulated and the unregulated (Lotman, 1975).
- (ii) As indicated in the previous section, informal rules may emerge and override the formal rules. This happens for a variety of reasons. Rules never regulate actions fully, even in the most elaborate interaction situations including rituals and dramaturgical settings. For one, formal rules fail to completely specify action or provide exhaustive directions. They do not cover all

¹⁸ The socially formalized or institutionalized properties of a rule regime should not be confused with logical coherence (or incoherence) of the regime.

relevant or emergent situations. The situations which call for rule application are particularistic, even idiosyncratic, whereas formal rules of behavior are more or less abstract and general. But, secondly, actors may be uncertain or disagree about which formal rules apply or about the ways in which to apply them, especially in emergent or novel situations. In both cases they engage in situational analyses and rule modification, or even rule innovation out of which emerge informal rules - these may or may not be formalized later.

- (iii) The application and implementation of rule systems or particular rules may be problematic, for instance, requiring special cognitive and practical skills a complex process in its own right (see Burns and Gomolinska 2000). A shared, operative institutional paradigm organizes actors' cognitive and normative modes of analysis and judgment. This paradigm includes not only knowledge of the rule system but also interpretative rules and learned capacities for semantic and pragmatic judgments relating to the application of the system. The operative paradigm mediates between an abstract and often ideal(ized) rule system, on the one hand, and concrete situations in which actors implement or realizea rule system and its practices, on the other. While this paradigm helps to situate or contextualize abstract rules in relevant action situations, it constitutes yet another, distinct source of rule adjustment, reform or reformulation.
- (iv) The concrete world changes, making rule system implementation problematic, even in the case of systems that previously were highly effective and robust. Consequently, there are pressures on actors to adjust, adapt, and reform their organizing principles and rules.
- (v) Situational conditions may make costly the implementation of particular rules and rule systems in social activities or block it altogether. By shaping action opportunities and interaction possibilities, ecological and physical factors limit the range of potential rules that can be institutionalized and implemented in practice. The actors involved may be compelled or strongly motivated to modify, radically transform, even replace rules or rule system(s) in order to increase effectiveness, achieve major gains, or avoid substantial losses.
- (vi) If an action at deviance with cultural rules or standard interpretations is perceived by other actors as advantageous, it may be copied. Its ability to spread, providing a new cultural variant, depends on three factors: (a) its perceived desirability or effectiveness; (b) the ability of those with interests in the content of the rule system to sanction the use of the new rule (and to overcome the opposition of others); (c) the openness to acquisition, retention, and transmission of a rule at variance with core key social rules of the cultural system.

All this implies that at the same time that social rule systems strongly influence actions and interactions, they are formed, reformed and transformed by the actors involved. The complexity of social life requires some imagination in applying rules to a specific action and interaction context. Highly formalized, systematic rules have to be interpreted and put into practice using situation information and knowledge. Human agency is manifest in this dialectical process. Particular actors, with their specific competencies and endowments, make situational analyses and engage their imagination, while developing interpretations and strategies which lead them to modify old and create new rules in response to the immediate pushes and pulls of the situation.

REFERENCES

- Burns, T. R. and T. Dietz 1992 "Cultural Evolution: Social Rule Systems, Selection, and Human Agency." *International Sociology* 7:250-283.
- Burns, T. R., T. Baumgartner, and P. DeVille 1985 Man, Decision and Society. London: Gordon and Breach.
- Burns, T. R. and H. Flam 1987 The Shaping of Social Organization. London: Sage Publications.
- Burns, T. R. and Gomolińska A. (2000) "The Theory of Socially Embedded Games: The Mathematics of Social Relationships, Rule Complexes, and Action Modalities." *Quality and Quantity: International Journal of Methodology* Vol. 34(4):379-406.
- Burns, T. R., A. Gomolinska, and L.D. Meeker 2001 "The Theory of Socially Embedded Games: Applications and Extensions to Open and Closed Games." *Quality and Quantity: International Journal of Methodology*, Vol. 35:1-32.
- Burns, T. R. and P. Hall 2012 *The Meta-power Paradigm: Structuring Social Systems, Institutional Powers, and Global Contexts*. Peter Lang: Frankfurt/New York/Oxford.
- Burns T.R., Roszkowska E. (2005) "Generalized Game Theory: Assumptions, Principles, and Elaborations Grounded in Social Theory". *Studies in Logic, Grammar, and Rhetoric*"Vol. 8(21):7-40.
- Burns, T. R. and Roszkowska, E. 2007 "Multi-Value Decision-Making And Games: The Perspective of Generalized Game Theory on Social and Psychological Complexity, Contradiction, and Equilibrium." In: *Festskrift for Milan Zeleny*. Amsterdam: IOS Press,
- Burns, T. R. and E. Roszkowska 2008 "The Social Theory of Choice: From Simon and Kahneman-Tversky to GGT Modelling Of Socially Contextualized Decision Situations." *Optimum-Studia Ekonomiczne*, No. 3 (39).
- Burns, T. R., E. Roszkowska, N. Machado 2014 "Distributive Justice". *Studies in Logic, Grammar, and Rhetoric*.
- Carson, M., T. R. Burns and Dolores Gomez Calvo. 2009 *Public Policy Paradgims: Theory and Practice of Paradigm Shifts in the European Union*. Peter Lang, Frankfurt/New York/Oxford, 2009
- Giddens, A. 1984 The Constitution of Society. Oxford: Polity Press.
- Goffman, E. 1974 Frame Analysis: An Essay on the Organization of Experience. Cambridge, Mass.: Harvard University Press.
- Harre, R. 1979 Social Being Oxford: Blackwell.
- Harre, R. and P.F.Secord 1972 The Explanation of Social Behavior. Oxford: Blackwell.
- Lotman, J. 1975 Theses on the Semiotic Study of Culture. Lisse, Netherlands: Peter de Ridder.
- Parsons, T. 1951 The Social System. New York: Free Press.
- Posner, R. 1989 "Toward a Semiotic Explication of Anthropological Concepts." In: W. A. Koch (ed), The Nature of Culture. Bochum: Studienverlag Dr. Norbert Brockmeyer.
- Powell, W.W. and DiMaggio P.J. (eds.) (1991) The New Institutionalism in Organizational Analysis. Chicago: University Press.