TYPOLOGY OF SOCIAL ACTIONS BASED ON THE LIVING SYSTEM THEORY

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ABSTRACT

It is impossible to make progress in social theory without inquiring about social actions; therefore, many leading sociologists refer to this notion in their work. Max Weber, Talcott Parsons and many other sociologists attempted to ground not only their works but also the science of sociology as a whole on a theory of social actions. Max Weber defined sociology as "the science which attempts the interpretative understanding of social action in order thereby to arrive at a casual explanation of its course and effects". Moreover, he explicitly singled out social action as the “central subject matter” of his sociology. Hence, comprehensive typology of social actions can be very helpful in sociological analysis.

Usually, social actions are classified by actors’ intentions. In this paper, types of social actions are categorized both by actors’ intentions and by the actions’ results, including both the intentional and unintentional outcomes. This was achieved through consideration of the social actions in the framework of J.G. Miller’s living systems theory. This theory regards each living system as composed of 20 subsystems that process information and matter/energy inside the living system and between the living system and its environment. These 20 subsystems are considered at eight levels: cell, organ, organism, group, organization, community, society and supranational systems. The first three constitute the level of biological living systems; the other five comprise the level of social living systems. Social actions are interactions among living systems or among different parts of one living system at the social level. The proposed typology of social actions is based on analysis of developmental, reproductive and interactional processes in the social systems.

In order to live and function, living systems must allow their matter/energy-processing subsystems to work, so all social actions in social living systems can be associated with the functioning of these subsystems. Seemingly, the number of goals for social actions as well as the number of their outcomes is very high, however, by relating principal intention and main outcome of the considered social action to specific matter/energy-processing subsystems, their number can be significantly reduced. This is done by determining the main subsystem that was intended to be affected by the planned social action, and the main subsystem that was actually impacted by it. In many cases, it is the same subsystem; that is, the intention coincides with the consequence. As a result of this analysis, the two-dimensional matrix of types of social actions was constructed, and the methodology of assigning any social action to a specific cell in the typological matrix was proposed. Every social action in this typology is designated by the names of the pair of the involved subsystems; if they coincide, the type is labeled by the name of one subsystem. Obviously, as in any classification, there also exists an element of arbitrariness in the relating of the social action to its type. More detailed typology of social actions on the basis of the living

systems theory can be developed by including in the analysis the information-processing subsystems.

Keywords: Living systems theory, social actions

SOCIAL ACTIONS TYPOLOGY

Theories of Action

The concept of "action" has always played a significant role in sociology. It is widely agreed upon that is impossible to make progress in social theory without referring to social actions (Stones. 2009). Many leading sociologists have discussed this notion in their work. Max Weber and Talcott Parsons, who have deeply impacted theory formation in this area, strived to base not only their works but also the field as a whole on a theory of action (Joas, 1996). Max Weber (1947) defined sociology as "the science which attempts the interpretative understanding of social action in order thereby to arrive at a casual explanation of its course and effects" (p. 88). Weber (1968) explicitly singled out social action as the "central subject matter" of his sociology (p. 24). Talcott Parsons' masterwork of 1937 was called *The Structure of Social Action*. Other leading sociologists who indicated the supremacy of action theory in the discipline are George Herbert Mead, Alfred Schutz, Jiirgen Habermas and Anthony Giddens.

Among theories of action, philosophical action theory, or the philosophy of action, should be distinguished from sociological theories of social action. Sociological theories of (social) action study the various types of social actions and link them with their various social outcomes, whereas the philosophical theory of action studies processes producing conscious human activities. The philosophical theory formulates very broad propositions about the nature of action. One philosophical theory of social action, called the purposive-causal theory, is presented by Tuomela (1984). The philosophical assumptions of this theory are associated with the mental backgrounds of action and with the purposive causation and generation of action.

Typologies of social actions

An intelligent being cannot treat every object as a unique entity in the universe. Rather, objects must be assigned to definite kinds so that the knowledge about similar objects gathered in the past can be applied to the observed object (Pinker, 1998).

Max Weber (1964) identifies various types of social actions by the meanings on which they are centered:
1. Traditional social actions are actions based on established custom.
2. Affective social actions are actions determined by an actor's emotional state.
3. Value rational social actions are actions that are determined by a conscious belief in the inherent value of a type of behavior (e.g.: religion).
4. Instrumental-rational social actions are actions that are undertaken to reach a certain goal.
The above classification does not relate to what the action does but rather to what motivates the performer of the action. In each of Weber's types of social actions, an

actor has some motivated intention, either clearly or vaguely formulated. This actor's intention thus can be identified and used for classification. Weber's classification of actions types is unsatisfactory in various respects. It takes its starting point from the concept of rationality and the distinction of two different kinds of ultimate-end systems and the corresponding relation of ultimate ends to the choice of means. By contrast with these rational types, he then formulates what are essentially two different residual categories. One, the 'affectual' type, does not distinguish what may be called biologically inherited emotional tendencies from value-attitudes, which are not formulated in a logically determinate fashion, and hence not involved in the rational types.

The taxonomy of social actions proposed by Seumas Miller (2001) comprises four kinds of human action: natural individual action, natural interpersonal action, social interpersonal action, and social individual action. The latter two kinds of human action are called simply 'social actions'. Habermas, in *The Theory of Communicative Action* (1984-7), outlines four "basic, analytically distinguishable" concepts of social action in social philosophy and the social sciences. These are teleological (strategic), normatively regulated, dramaturgical (actions performed for other observing actors), and communicative actions (when actors in society seek to reach an understanding and to coordinate activities; Campbell, 1998).

In this very brief outline of the theories and typologies of social actions, I only attempt to indicate some of the directions that a typology of social actions based on a Living system theory can take as its general starting points. Any additional typology can emphasize and elucidate some additional aspects of the studied phenomena and thus aid in their understanding. This is the rationale for proposing a new typology.

Organization of Social Action

The following paragraphs seek to inspect those aspects of social action organization that should be taken into account in constructing a typology of social actions and in clarifying its fundamentals.

The Meaning of Social Action

Leading social theorists agree that social actions are determined by their meaning. Social action is behavior that is oriented to the behavior of others and to which the actor attaches subjective meanings (Weber, 1968, p. 22–4). According to Weber, 'action' refers to human behavior when and to the extent that the agent or agents see it as subjectively meaningful. In this context, 'meaning' may refer to either (a) the meaning actually intended either by an individual agent on a particular historical occasion or by a number of agents on an approximate average in a given set of cases, or (b) the meaning attributed to the agent or agents, as types, in a pure type constructed in the abstract (Weber, 1991, p. 7). For Parsons (1937), action is behavior directed by the meanings attached by actors to things and people. Actors have goals and select appropriate means; courses of action are constrained by the situation and guided by symbols and values. The most important category is interaction; that is, action oriented towards other actors. Mises states that: "Human action is purposeful behavior. Or we may say: Action is will put into operation and transformed into an agency, is aiming at ends and goals, is the ego's meaningful response to stimuli and to the conditions of its environment, is a person's conscious adjustment to the state of the

universe that determines his life" (Mises, 1998, p. 11). Social actions are characterized not only by meaning and purposefulness but also by agreement with social practices such as social norms, institutions, attitudes, and the like (Miller, 2001). Practically, the same concept of action has been common to many theorists, by whom individuals are seen as purposeful agents, guided by values and restricted by social settings (Coleman, 1986).

Is it possible for human action to be non-social? The answer to this question is likely not, at least not while a human being is in consciousness. Nevertheless, even if one was unconscious, the consequences of one's actions can be social. For example, if a driver dies from a heart attack while driving and kills a passerby in the process, this would be a social action even though it was unintended, because the death was an unintended result of the intended social action of driving the car. Cicero, who spent a lot of time writing alone, considered writing a primarily social practice, because he constantly thought about the ideas of his friends (Rigodanzo, 2016). Social action that is aware of other people but does not aim to affect them in any way nonetheless exerts some effect on them. Even the mere taking of a place in space and time by the actors while interacting with their social environment indirectly impacts or takes into account other people. Throwing a stone is a social action; it involves an intention, a purpose, and a bodily movement guided by the person and is conditioned by a goal to either hit somebody with the stone or, on the contrary, not to hurt anybody. On the other hand, catching an infectious disease cannot be considered a social action because it is something done to a person by natural forces and not by anyone's intention. However, receiving a venereal disease is a social action, because a person is usually aware of this possibility when making the decision to engage in sexual intercourse. No action can be called a social action unless it has a relationship with the present, past or future behavior of others.

Structure of Social Action

Before delving into the classification of social actions, it is necessary to understand their structure. The understanding of social actions is complicated by their complex configurations, as social theory has to analyze the functioning of an action as a system (Coleman, 1986). an action is a system; it can be seen as a set of elements with complex relations between them at all stages of its development—intentions, accomplishment, and results. The composite actions consist of actions that can be distinguished from each other. Basic actions and non-basic actions can be distinguished (Goldman, 1970). Non-basic actions are those that are accomplished by performing some combination of basic actions. Composite social actions can include various social actions of various types and orientations. A single-agent social action is an action at the level of organism. A multi-agent social action is an action at the level of social living system—group or higher. Multi-agent actions are either mutual actions or combined actions, and these must be distinguished. The actors in a mutual action have a known mutual end, while the combined action actors are not aware of a common end even if one exists. Mutual action has a common goal for all involved agents, while combined action is performed by a number of agents each pursuing their own goals. Combined action, though it is comprised of actions of a number of agents may not have a common goal, though it can have a common result. Therefore, every living system engaged in a combined action performs an action of a different type, while in mutual action all personal actions can be classified as belonging to one type. In mutual action, the agents are consciously coordinated, while in the combined action

they are interconnected or not without their will. All components of actions are interdependent. The social action environment comprises the interfering social and non-social acts, internal and external, for the processes that together determine the outcomes of the intended action. In addition, usually a person is simultaneously involved in a number of social actions; for example, he or she can be at work and conducting a private conversation with a colleague.

Giddens (1993) explains: "I shall refer to identified 'elements' or 'segments' of actions as acts, distinguishing these from 'action' or 'agency', which I shall use to refer generically to the lived-through process of everyday conduct" (p. 81). Action is more than a sum of the acts it comprises. An act can be done without intention because it was attributed to the action as a whole, but an act always has consequences. An act can intervene in and influence an action. In any action can be observed internal and external acts. Internal acts belong to the action system; they are its components. External acts are not the action's parts; rather, they are introduced from outside by forces external to the action's system. For example, say I took a coin to buy ice cream, but on my way the ice cream shop I dropped the coin because my attention was distracted by a barking dog. Taking the coin and going to the shop were elements of the planned but unaccomplished social action of buying the ice cream. The barking of the dog was the external element caused by an external force for the social action defined as "buying the ice cream".

An action is a process started by an agent or agents in a specific setting. A social action is a process, which is a system developing in time. According to Parsons (1937) a social action is a process in the actor-situation system. Giddens defines action or agency as "*the stream of actual or contemplated causal interventions of corporeal beings in the ongoing process of events-in-the-world*" (Giddens, 1993, p. 81; italics in original). Social action is a process with a beginning, carrying-out phase and completion. It follows a wave-like pattern of development. The wave-like development of collective social action goes through three main stages. In the first stage, the less integrated in the hosting system are joining, among them the initiators of the action; they are alienated because they want a change and vice versa (egoistic and anomic reasons for social action). At the second stage, the integrated persons, attracted by the goals of the action and wanting to serve the common cause, begin to join (altruistic reasons). Finally, at the third stage, the people attracted by the processes within the social action, such as personal relations with the participants from the earlier stages, enter the action. The last stage can also result from the institutionalization of the social action, if during the social action mechanisms were created that support its existence independent of the external conditions. In single-agent social action, the first stage involves developing intention, the second involves the accomplishment of the action and the receiving of desired and undesired results, and the third stage involves doing things that were induced by the main action. In the study of emotional dynamics of social protest events, Tova Benski (2010) demonstrates that these processes take a wave-like form, having a beginning, middle and end, with each phase accompanied by different constellations of emotions. In detecting the intentions of the actors involved in the social action and the outcomes of the actions, it is crucial to know the stage of the social action, because the intentions depend on the emotions of the actors as well as the perceived and actual outcomes.

Living System Theory Based Typology of Social Actions

Preliminary remarks

The previously mentioned theories of action classify actions by the intentions of the actors. Intention is an immediate basis of social action. Intention has causes, factors and conditions in addition to the action itself. The cause of an action and the actor's intention must be distinguished. Actors can be moved by causes of which they are not aware and may even consider other entities as triggering their intentions. Intention to engage in an action is one of the results of a more or less rational decision-making process that precedes the action. However, it is well-known that people often do not act in accordance with their stated intentions (Ajzen et al., 2004). Intentions include the projected outcomes of the actions. "Actions are 'caused' by their (anticipated) consequences" (Coleman, 1986, p. 1312). It is important not only how the person engages in an action but also what outcome(s) he/she intended. Social action can be planned and spontaneous to various degrees. The results also include the plan of the action and the planned, anticipated, desired and ideal outcomes of the action. Every intention can be aroused only from by characteristics of the situation known to the agents, and thus it is prone to be erroneous and lead to undesired results. It is impossible to completely describe any concrete situation because it is linked to the entire universe; we are able only to provide some observable characteristics of the observed state. Additionally, it is impossible to know all consequences of a social action because its influence can last much longer than a single human lifespan. Social action also has an intended end, actual end and perceived end. The perceived end and actual end cannot always be identified, so classification of the action can be wrong. The problem of the action's classification is further complicated by the fact that intentions are often misread and their outcomes are frequently overlooked. First, the action usually has many kinds of results, some of which are expected while others are not and cannot be expected. The latter are theoretically impossible to forecast and therefore are not taken into account, though these outcomes are decisive for the classification of the social action.

Social actions can be self-organized or heteronomous (externally organized). Consequently, the desired goals of the multi-agent social action can be known to all the actors or, at times, concealed from them by some of the actors or by particular circumstances. Individual goals of the social actions' actors can vary strongly from their agreed-upon common goal because the participants can desire to reach their personal end through reaching the common one. The living system, at a higher level, can have a purpose that only a few of the living systems comprising it grasp as its goal. The living system, at a lower level, can be aware or unaware of the higher-level purposes or not. A well-known parable about temple builders illustrates this situation:
Four builders were working at the building lot.
"What are you doing?" they were asked.
"I am carrying stones," replied one.
"I am bringing water," said another.
"I am earning a living," answered the third.
But the last one said, "I am building a temple."
Here, the living system at the level of organization has the purpose of building a temple, but only one of its members appreciates it. Thus, even though the actions performed by the workers are social, their intentions and the results of their intentions

differ significantly from those of the living system of the higher level. This discrepancy entangles the classification of the individual's social action.

Furthermore, an actor can think about an action and its consequences for the immediate living system to which he/she belongs (e.g., the group level), and the decision can be ethical from this point of view. However, for the living system at the higher level, (e.g., the community level), the same decision might be very destructive. Such complications can be unknown to the actor and thus not be taken into account during the decision-making, or the person may neglect such consequences. This multilevel multiplicity of consequences of social actions also complicates their classification. The most important outcome must be carefully chosen, because its importance is in the eyes of classifier. In general, social action can be classified as belonging to a number of different types at the same time; however, usually one function of the social action can be identified as dominant. All these considerations should be borne in mind when the classification of social actions by types and forms is made.

Principles of the typology of social actions based on LST

The proposed typology of social actions is based on analysis of the development, reproduction and interaction of social systems in the framework of Miller's living systems theory (Miller, 1978, 1990). This theory regards each living system as composed of 20 subsystems that process information and matter/energy inside the living system and between the living system and its environment. These 20 subsystems are considered at eight levels: cell, organ, organism, group, organization, community, society and supranational system. The first three constitute the level of biological living systems, while the other five constitute the level of social living systems. The subsystems that process both matter/energy and information are (1) reproducer and (2) boundary. The subsystems that process primarily matter/energy are (3) ingestor, (4) distributor, (5) converter, (6) producer, (7) matter/energy storage, (8) extruder, (9) motor and (10) supporter. The last 10 subsystems process primarily information: (11) input transducer, (12) internal transducer, (13) channel and net, (14) timer, (15) decoder, (16) associator, (17) memory, (18) decider, (19) encoder and (20) output transducer.

In order to live, any living system must enable its matter-processing subsystem to work, so all human actions in social living systems can be related to the functioning of these subsystems. Situation calculus (McCarthy & Hayes, 1969) considers the system as a set of states, each describing the system at a definite moment in time. An action is a function taking place between one state and another and is specified by a set of settings in the initial state and a set of outcomes in the final state (Allen, 1984). Giddens emphasizes the role of actors in the realization of their intentions and the real material change made by such action (Campbell, 1998). The question of classification of social actions is therefore the question of the links between the causes of an action and the mechanism leading to the outcomes. The causes of social actions are mediated by actors' intentions, and intentions and causes are both determinants of the social actions. However, social actions are classified by actors' intentions and not by the causes of the actions, because the former and not the latter make the action social. This complexity of social actions' structure influences the classification of the individual social action. Analysis of social actions depends on what action is the focus of the analysis; this action can be a part of a composite action. Action must be

analyzed and classified as a whole that encompasses intention, implementation and results.

The result of any social action is a mobility of some kind, either social or physical; it can be a spatial movement, a change of social status, or both. Generally speaking, actors are moved by the social action from one state to another. The typology of social actions based on LST reflects this transition from the initial state of the living system to its state after the accomplishment of the social action. Thomas Aquinas believed that human actions have kinds, such as theft or almsgiving. He used five different terms – end, object, matter, circumstance, and motive – to categorize the species of human actions (Pilsner. 2006). This typology of social actions, in some aspects similar to that of Aquinas, is based on intersection of known intentions of the actors and known results of the actions. The number of causes and motives for social action as well as the number of its outcomes are huge, possibly infinite, so this typology puts them in the relatively small scheme based on the Living system theory. Associating the social actions with a definite number of matter/energy-processing subsystems in a living system provides the possibility to build a finite number of possible types of social actions. That is, it gives a finite number of possibilities for causes and consequences because it relates them to the definite number of matter processing subsystems in any living system. The problem is in stating the main subsystem that was intended to be affected by the planned social action, as well as the main subsystem that was actually acted upon by the action. Obviously, there is always an element of arbitrariness in relating a social action to its type. S. J. Gould (1981) said about existing and non-existing taxonomies: "Taxonomy is always a contentious issue because the world does not come to us in neat little packages" (p. 158).

Short descriptions of some social action types based on the Living system theory are provided below to illustrate the principle of the proposed classification. Reproducer-type actions are actions leading to the creation of new living system. Extruder-Ingestor-type actions are actions leading to the integration of the actors into a living system different from the previous one. The act of moving from system to system is essential for this type. Ingestor-type actions are actions leading to integration into the living system where the actor(s) reside. This is also a type of social action in which the act of extruding is absent, even when the subject of the action is moved to another living system. For example, a kidnapped person was not extruded by the original system but was taken from it and moved to the destination system, in which was eventually absorbed, by an external force. Extruder-type actions lead to disintegration from the original living system, where the actor(s) reside, without reference to the ingesting system. The described types are the basic types of social actions, and the following action types are the subtypes, which can be performed in order to achieve the goals of the basic social actions. Producer-type social actions are actions that produce some new products. Boundary-type actions are actions that affect the living systems boundaries. Motor-type actions move objects within or between living systems. Matter-Energy Storage actions put something aside for future use or in order to isolate them from the other parts of the living system.

The above descriptions relate to the outcomes of the types of the living systems. Similar descriptions can be given for the intentions of the types of living systems. Generally, the types of social actions are constructed by combinations of intentions and results of the social actions, as shown in the Table 1. Every type of action is

denoted by a combination of letters that represents a cell row and a cell column in the table: E-I, R-R, P-I and so on. If the intention and outcome coincide, the type of the social action is denoted by one letter, according to the involved social action.

Table I. Matrix of action typology by intentions and results

Results / Intentions	R	B	I	D	C	P	M/E	E	M	S
R										
B										
I										
D										
C										
P										
M/E										
E										
M										
S										

Legend: (R) reproducer, (B) boundary, (I) ingestor, (D) distributor, (C) converter, (P) producer, (M/E) matter/energy storage, (E) extruder, (M) motor and (S) supporter.

Examples of Types of Social Actions

Social action can be classified as Supporter-type action if the actors want to support existing social order; thus, police officers perform Supporter-type actions. Firing someone from her/his job is an Extruder-type action, because it causes the exit of the fired person out of living system at the level of organization. It can also be classified as a Supporter-type action if its result is strengthening the extruding living system (i.e., the organization that fired the person). If a person goes alone into the street and throws a piece of waste paper into a garbage can, this is a social action because the person is aware of society's rules and behaves accordingly, even when unattended. This social action is of Extruder-type. However, if the person throws the paper on the pavement, this is also a social action, but of the Boundary-type, because societal norms were violated and the boundaries of other living systems at various levels were trespassed. If somebody comes to work while sick with influenza, this is a Distributor-type action by its outcome, because the person distributes the sickness, though by the actor's intention it is the Producer-type action; thus, on the whole it is a P-D-type of action. If somebody intentionally infects others with AIDS, this is a Distributor-type of social action, because the result was intended by the actor. Successful preparing a meal can be classified as a Converter-type action both by its intention and by its outcome.

On 28 April 1789 in the South Pacific, on the Royal Navy vessel HMS Bounty, a mutiny occurred. Dissatisfied crewmen seized control over the ship from their captain Lieutenant William Bligh. Some of the mutineers settled on Pitcairn Island (Bligh & Christian, 2001). It is still inhabited mostly by descendants of the Bounty mutineers and the Tahitians (or Polynesians) who accompanied them. The mutineers did not intend to create a new society; they just wanted to hide somewhere (M-E-S-type of social action), but eventually they created Pitcairn, the least populous national

jurisdiction in the world (R-type of social action). This is a case of M-E-S-R-type social action.

A bank robbery can exemplify some different kinds of social actions depending on its possible outcomes. One of these is considered here. By the robber's intention, the robbery was an E-I-type action, because its purpose was to move the robber from her/his initial situation to a new one by means of the robbed money. The robbery succeeded – the robber got the money – but immediately afterward the robber was arrested and put in jail; that is, by its actual outcome the action can be classified as Supporter-type, and overall the bank robbery is classified as an E-I-S-type social action.

Bringing foreign workers to Germany in the 1960s was a social action of the P-E-I-type: "We called upon the labor force and the people came," as Max Frisch said. This social action was intended to bring people to produce goods (P-type), but its result was to bring unintegrated people from the Turkish society and integrate them into the German one (E-I-type).

Producing new information, such as by writing a new song or inventing a new gadget, affects the matter in its remote consequences, even though its immediate outcomes process only information. If, according to the information produced in such action, people are organized in space and time in a definite manner, the action is of Producer-Producer-type, because it impacts the matter; that is, the humans and their surroundings in its distant results. If an action creates new rules, which define the boundaries of social entities, the action is of the Boundary-Boundary-type.

Future considerations

Living systems and their dynamic interactions constitute the material substrate for the emergence of social actions. By using Living systems theory, single and multi-agent social actions can be classified with same scheme. Living systems theory enables the unification of various levels of analysis of social actions—from individual to supranational.

A more detailed typology of social actions on the basis of the living systems theory can be developed by including in the analysis the information-processing subsystems. Classification of social actions by matter processing subsystems is a classification by what the action does, and classification by information processing subsystem adds an arrangement by how the action is performed. In general, social actions should be classified by what they do, how they do it, and what they were initiated to do. The typology proposed here largely ignored the 'how', but it can also be addressed with the use of the Living systems theory.

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