

Transitive Behavioral System¹

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The term behavioral system was used by J. Bowlby (2010) in the context of an infant's/young one's attachment to the primary caring adult. *Attachment* or *adherence* is one of behavioral systems ensuring the survival of *Homo sapiens* species (and other species as well). Young ones, whose attachment to the "primary caring adult" is strong enough, are protected from various kinds of danger. Abrupt separation is extremely stressful for the young one. Since the sixties of the twentieth century, the concept of attachment became one of the most influential theories in the field of developmental psychology.

Bowlby described two complementary behavioral systems that are essential for proper start of child's mental development: *attachment/careseeking system* and *care-giving system*. Bowlby himself was interested in attachment as the bond expressed by a child (Bowlby 2010); neither the caregiver's attachment behavior towards the child nor the attachment behavior between adults were in the center of his interest. The latter — caregiving — system has been studied and described by a team lead by H. Papoušek; they used the term *instinctive parenting* (Ditrichová, Papoušek, Paul 2004).

Researchers dealing with child development started to consider other systems controlling the behavior at an early age. Empirical studies of interactions between children and caregivers have brought new ideas: monitoring children's behavior in social situations indicated that apart from primary intersubjectivity (which is basically the same as Bowlby's attachment), so-called *secondary intersubjectivity* develops around the ninth month of age (Threvarthen, Aitken 2001). Secondary subjectivity can be defined as coordinating attention, feelings and intentions between the infant, another person and "third object". This intersubjectivity is preceded by "proto-conversations" between the infant and the caregiver; they start at 2 months of age and both verbal and para-verbal means are used. Proto-conversations enable progressive construction of the meaning of events within the communicating couple. Threvarthen as well as other authors came to a conclusion that apart from emotional bond between the caregiver and the child, interactions also develop between the child and close family and friends. These interactions resemble how are matters of joint interest communicated between people regardless of age and quality of emotional bond that might exist between them. This behavioral system was later given the term *interest sharing with peers*.

Studying the behavior of adults has also extended the range of behavioral systems that control human behavior. Heard, Lake and McCluskey (2009) observed nonverbal adult behavior during an interaction with assisting professional and analyzed the contents of adult communication in such situation. Based on their findings, they

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added more instinctive behavioral systems into Bowlby's concept. Besides the already mentioned interest sharing with peers, they introduced:

- *system for affectional sexuality*
- *system for personal defense*

They added two more systems that are activated when the primary caring figure is not available:

- *external supportive system*
- *internal supportive system*

The latter corresponds to Bowlby's internal working model, which can be described as a result of personal experience with caregivers. External supportive system are ties to close family and friends. If a person's working model is based on long-term negative experience, these two supportive systems become dysfunctional. Non-functional ways of gaining support are especially attempts to establish a bond with caregiver, who rejects or threatens the person seeking his/her care, and efforts to achieve immediate compensatory satisfaction.

All these systems are activated in situations, when the child, adolescent or adult feels threatened. The function of these systems is to maintain the state of wellbeing. This formulation redefines the target state of behavioral systems functioning. Functioning of the two systems originally studied by Bowlby had the goal of survival. Restoring the state of wellbeing after disruption of the balance has Heard and her colleagues termed as *restorative process*. Behavioral systems participate in behavior management according to the person's current situation and they also depend on his/her experiences. According to Heard et al. (cited work), it is therefore impossible to create their static hierarchy, which some theories of human needs attempted. Some behavioral systems can complement each other, they can follow one another and in some cases they can even come into conflict with each other because they have different goals.

Behavioral system is not a new term in scholarly literature. With different connotations, it has been used for several decades. Johnson (1980) used the term three decades ago in the context of nursing theory. Apart from the attachment system, Johnson further identified *dependency system*, which aim is to gain attention and recognition; *sexual system*; *aggressive system*; *achievement system* and moreover, *ingestive* and *eliminative systems*. According to Johnson, the last two behavioral systems are the basis for the formation of socially acceptable manners of ingesting and eliminating food.

Behavioral programs are always shaped by period and cultural customs. Heard and her colleagues even derive the concept of behavioral systems from people's behavior in relatively unique situation of our culture — during psychotherapeutic session. However, situation in which one professional is helping one client (or a group of clients) cannot represent all the major forms of human experience.

Independence of individual behavioral systems and rules for their coordination are matters of future research. Obviously, the analysis of human brain functioning will be of great significance for such research and the comparison of human behavior with the behavior of related species will be important as well. Behavioral *modules*

used by the behavioral systems function as their subsystems. For example, ethology indicates that partnership behavior “borrows” some subsystems from parental behavior; that applies to animals as well as humans.

Behavioral system as a general concept is nowadays characterized by:

- specific biological function,
- specific triggers,
- system of specific strategies that serve to achieve a goal,
- state that enables the termination of the system activation,
- cognitive processes that activate and operate the system and
- specific neural connections to other behavioral systems (Mikulincer, Shaver, 2007).

There is an idea of existence of independent behavioral system suggested in this information. This behavioral system enables an adolescent to cross from childhood to adulthood. Working title of this system is *transitive behavioral system, TBS*. It can be described by the above mentioned points.

The biological function of TBS is detaching the adolescent from the supportive family environment or other group/person that provide care during childhood. It is a kind of negative to interpersonal attachment. This attachment is perceived as fundamental condition for survival and for building mental integrity. The bond with the family is not broken completely; it is weakened and pushed into the background. If this detachment does not happen, the adolescent stays attached to the caregiver for a long time or even for the rest of his/her life. It happens for example in cases of young people with disabilities or in cases of adolescents with neurotic personality structure.

TBS is usually triggered by situations where the adult authority insists on following some rules. These confrontations widen the distance between the adult authorities and adolescents.

Searching for risks, “chase for new adventures”, is regarded as a specific strategy. In the field of interpersonal behavior, this strategy is expressed by inclination towards peers and also by searching for alternative adult authorities/role models outside the circle of the family of origin. Our cultural environment offers high variability of these role models and idols; they can be found in musicians, actors and athletes presented in the media and also in the circle of extended family.

State that enables deactivation of the system is the feeling of independence and self-sufficiency.

As relative cognitive processes are considered critical examinations of attitudes and values that the adolescent was taught by his/her family of origin or by his/her original educational environment. It is also an attempt to discover new horizons.

Changes in brain during adolescence can be nowadays very well described with the help of new imaging techniques, especially by magnetic resonance imaging (MRI). These changes can be collectively characterized as reduction of the redundant connections and strengthening the useful connections — the grey matter of brain that contains synapses is shrinking, whereas the white matter grows. Similar changes are observable with rats during adolescence. With rats as well as with humans, the influence of the environment on the process can be proved (Giedd, Blumenthal 1999). The emotional

reward centers are hypersensitive and the main reward is peer recognition, for which the adolescents are willing to undergo great risks. On the other hand, behavioral control centers in prefrontal cortex are activated less than in the adult brain; these centers are usually activated no sooner than on the threshold of adulthood (Steinberg 2005).

Specific situation of our time and within our cultural circle is the extension of the period of adolescence. In developed countries, the average age when children reach biological maturity is continually decreasing. However, they attain full social independence no sooner than between the age of 20 and 30. (In South European countries it happens even later.) Specific is also reducing the means of social control exercised by adults towards adolescents. Adolescents' behavior lies mainly in the hands of educational institutions; and sometimes in the hands of interests developing institutions that fill children's free time. Working parents can control their children's behavior by monitoring the activities that children participate in while they are "out of their parent's sight". There are groups of young people that have no connection to the adult world; these groups become a fertile ground for delinquent behavior of young people (Matoušek, Matoušková 2011).

In the past, the control of behavior was stronger because children's transition to adulthood happened very quickly and moreover, they could rehearse the performance of adult roles with the help of qualified tutor. Key competencies needed for adulthood were then tested during highly demanding rites of passage.

If the existence of TBS was generally accepted, there could be consequences such as:

- Adolescence would not be perceived as a period of mental development disorders, but instead, it would be a period when behavior has its clear purpose given by biological program.
- It would be taken into account that TBS prioritizes peers as the crucial reference group; willingness to take risks is stronger under this group's influence. Structure of this group, activities the group participates in and ways the group is managed are crucial factors directing the young person's further development.
- It would be taken into account that TBS requires "formatting" by intensive, direct and personal influence of adults (guides that make impression) representing cultural idols. This direct influence can never be replaced by celebrity shadows presented in the media.
- The opinion on parent's role during adolescence could be corrected. It could be admitted that during the period of adolescence, parents are not suitable for the role of the main development guides. The goal of TBS is to "sidetrack" the parents (without affecting the basic lifelong solidarity of family members).
- Although the adolescent moratorium with postponement of definitive commitments provides enough space for sexual and cognitive maturing (Erikson 1999), the risk of social failure is higher with missing or minimal social control (for those with dispositions) and for all young people there is a risk that the ability to control their behavior will be activated too late. Structured social control is necessary. Antisocial and delinquent adolescent behavior can be justly interpreted as calling for social control. The problem is availability of acceptable social control; besides other things, such control needs to respect dignity of the controlled person and it should not block his/her developmental potential.

- Long-term detachment from real life requirements is not good for the adolescents. In our society, it is important to provide children with practical life experience as soon as possible. All types of after-school activities that connect children and adolescents to the events of “adult” society should be encouraged.

FINAL NOTE

Behavioral system securing the attachment between adult partners is by some authors considered as a derivative of the early bond between child and caregiving adult (See many sources summarized in the works of Mikulincer and Shaver 2007). In case of separation/divorce of adult partners, this bond is broken. The possibility of interpreting this process by using the concept of TBS suggests itself. Hypothetically, we can conclude that some adults use TBS modules of behavior during the situation of separation. They do not delimit themselves towards parental authorities of their family of origin, but towards their partner who becomes unacceptable companion for them. Professionals working with couples going through divorce have the experience that roles of the people involved quickly crystallize into complementarity “the one leaving — the one abandoned”. Detachment of the person leaving is somehow similar to adolescent revolt, whereas the one who is being abandoned seems to be trying to reactivate the fading system of attachment which resembles parents trying to restore their bond with their adolescent child. The more the abandoned person tries to restore the reciprocity, the more the person who is leaving is disgusted by the other person’s behavior. The root of the word “attachment” is “to touch”. In our legal system, one of the legitimate reasons for marriage separation has been until recently “insurmountable distaste” of one the partners towards the other (Act No. 320/1919 Coll., § 13, paragraph i). This distaste is primarily manifested as distaste towards all kind of physical touching.

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