

BOX 1: Working definitions of key terms.

\* *“infodemic”*: used by the WHO in spring 2020<sup>[3]</sup> to characterize the enormous amount of information which in addition has a strongly differing validity. Now large research projects are running regards optimization of expert communication in health issues.

\* *“Great Reset”*: claim for a fundamental change in economy and politics in context of Covid-19<sup>[6]</sup>, that was interpreted by friends of conspiracy narratives as a vision of self-empowerment by elites.

\* *“cancel culture”*: media strategy that aims to ignore, devaluate, delegitimize, and exclude opinions and their proponents that are not conform with the opinion of the media and/or politics they represent (compare: political correctness)<sup>[7]</sup>.

\* *“spiral of silence”*: circular mechanism of production of public opinion by self-silencing of critical individuals that feel that their opinion is not compatible with the opinion of the majority and that in turn hinders mass media to thematize these deviant opinions - what is not in the media is not a topic in the society<sup>[8]</sup>.

\* *“situated individuals”*: conception of an individual person as the result of (former) interactions between the person and her environment, as a contrast to the idea of the existence of a decontextualized individuality<sup>[9]</sup>.

\* *“dissociated personalities”*: Hypothesis that a fragmented and inconsistent cultural world of values enforces the development of inconsistent personalities (compare object relation theory below).

\* *"fragmented acceleration society"*: this term should indicate that modern society is not only fragmented but also accelerating as it can be seen in finance markets where computers exchange monetary values in micro-seconds (algorithmic trading).<sup>[10]</sup>

\* *"loss of (coherent) resonance"*: "resonance" means the social response of actions of an individual; "coherence" means synergies of individual's action and social reaction, but also refers to the intra-personal coherence. <sup>[11]</sup>

BOX 2: Working definitions of key terms.

\* *affective-cognitive system*: This is a very useful two-level model of the mental system<sup>[16, 17]</sup>. It refers to two essential areas of human mental information processing that interact with each other within the framework of a systematic and systemic model of the mental, which conceptually consists of about a dozen key components and which derives from general psychology and psychopathology<sup>[17]</sup>.

\* *affective-cognitive model / reference structure / schema / representation*: It is the product of human affective-cognitive processing that acts as an internal reference system for new experiences<sup>[18]</sup> The terminology varies between different psychological schools (Peter Fonagy: "internal working model"), but we refer to Otto Kernberg's well-known object relations theory, in which affects help to bring order to cognitive experiences<sup>[18]</sup>. Therefore, we simply call it "experience matrix"<sup>[17]</sup>. Luc Ciompi, mentioned later, emphasizes the bottom-up process of shaping thoughts through feelings through the notion of "affect logic"<sup>[16]</sup>. In some cases, we use the term "emotions" as an equivalent of affects.

\* *Cognitive dissonance*: an unstable structure of the relationships of the elements of affective-cognitive representations, which can already be traced back to inconsistencies within a triangular constellation<sup>[19]</sup>.

\* *The self, the ego and the self-image*: The self-image (also: "self-representations") is the product of the processing of self-related experiences by the ego, which is understood as the operating component of the self<sup>[20,21]</sup>.

\* *Personality*: the trans-situational invariant behavioral disposition; according to the structure of the self (see above).

BOX 3: *The theory of cognitive dissonance*<sup>[19,23,24]</sup>: This theory is based on concepts of *graph theory*, which is currently successfully used in the context of systems biomedicine. This mathematical method has already been discussed in more detail in psychiatry for the development of *delusions*<sup>[25]</sup>. Although some empirical, conceptual and technical limitations of this theory need to be considered, similar applications of graph theory in psychology/psychopathology seem to be successful<sup>[25,26]</sup>. Even in health psychology, the theory of cognitive dissonance still has some usefulness, for example with regard to the understanding of persistent smoking, which gives pleasure, but also causes cancer: This conflict can be solved by the thought that the person can quit if only he really wants to.

In general, the theory assumes that any cognitive system can be analytically broken down into triads that have *positive* (consistent) or *negative* (inconsistent) *relationships* to each other. The relations are emotional experiences and the knowledge of causal effects (activations/inhibitions). If these structures consist of odd numbers (1, 3, 5, *etc.*) of negative relations, it is assumed that the entire structure is inconsistent (or unstable) and could ultimately cause resentment. However, if these structures consist of even numbers (0, 2, 4, *etc.*) of negative relations, the entire structure should be consistent (or stable), it persists, and evokes joy. Therefore, unstable structures provoke the tendency to integrate other affective-cognitive elements that make it possible to stabilize the system. It is noteworthy that structurally characterizing terms such as *consistency*, *balance*, *congruence*, *concordance* and *coherence* are useful

categories for characterizing the structural quality of affective-cognitive schemata (cf.<sup>[27]</sup>).

Box 4: *Object relation theory*. According to this theory, in early childhood emotional experiences are fragmented on an elementary level and in a chaotic order, and this structure serves as the most important reference structure in mental processing: there is first the "good" mother and the "bad" mother, represented by singularly separate elements of experience. These impressions are thus implicitly (unconsciously) constructed and affectively charged, but they are isolated and fragmented representations. Increasingly, the child organizes his experience emotionally polarized and distinguishes positive and negative experiences, which are expanded in the sense of "everything is bad" or "everything is good" and at the same time are merged. This is a bipolar stage of the structure of this matrix of representations (see Figure 2, left image). In a next step, the experiences are more and more integrated, also through images of the environment (namely objects such as the mother and the father) and the image of the person himself: environmental and self-related images gradually integrate the good and the bad experiences in the development (see Figure 2, right picture). Therefore, according to this theory, a kind of *quadripolar* matrix forms the basis of this reference system, a model structure that is also used in other applications of systems theory and is referred to here briefly as an "experience matrix"<sup>[32]</sup>.

Box 5: *Ecological psychology*. Basically, the need for space and the basic question of the "localization" of man (and other living beings) has already been described by philosophy<sup>[46]</sup>, behavioral biology<sup>[47]</sup> and ecological psychology<sup>[48]</sup> and already at the time of Freud's work by architects<sup>[49]</sup>, but it has not received much attention in the context of clinical psychology and psychoanalysis. In particular, ecological psychology and topological psychology, namely Kurt Lewin<sup>[48]</sup> and Roger Barker<sup>[50]</sup>, have explored this area, especially using the notion of "life space" (German: Lebensraum): The term "life space" refers to the mental representation of the topology of the spatial situation of the person and is scaled by ordinal approximation/distance measures (proximal / distal). Accordingly, we think that the experienced *heteronomy of distance regulation* in the psychotherapeutic context should be researched more intensively. It is assumed that it is relevant to understand diffuse feelings of discomfort that underlie the typical psychopathological syndromes such as anxiety disorders or depression. This problem area also shows that the exchange of medicine / public health with the environmental sciences such as architectural psychology or ecological psychology can be fruitful in conceptual and theoretical questions.