

Process and Structure -- dialectics instead of dichotomies.

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There is often a tendency to interpret structure as something hindering the evolution of processes, respectively to see both as polarities. One example: the dispute between two schools/directions of group learning, co-operative learning and collaborative learning. The latter tends to interpret co-operative learning, which puts more emphasis on pre-structuring of interactions, as being teacher-centred and controlled by the teacher, whereas collaborative learning proposes to leave process entirely up to the students and assumes that they do not need to learn how to work effectively in groups. Instead of thinking about the productive interplays and relationships in-between concepts, our western tradition teaches us to think in dichotomies and polarities....

When we want to get a deeper understanding of the relation between process and structure (as this workshop does) we can learn from other communities and disciplines. Having myself a background in pedagogy and higher education, the title of the workshop reminded me of TCI, a method, concept, and systemic model for working together used widely in adult education and group moderation (mostly in German-speaking countries). TCI focuses on group processes in learning and working and might offer a new, fresh perspective and a rich body of experience. Instead of thinking in polarities, it concentrates (among others) on the inter-relation of process, structure and - as third element - trust as a mediating variable. As all elements of TCI are highly connected to each other and form a system, pulling one element out is not possible without losing necessary context. Thus some explanation of the whole concept will be provided.

Theme-Centered Interaction

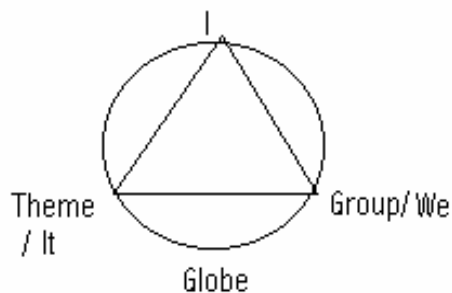
The concept of Theme-Centered Interaction (TCI) was developed by Swiss psycho-analyst Ruth Cohn during the sixties and combines ideals and concepts from humanistic psychology and elements from group therapy. Cohn wanted to develop a method that inherited insights from psychology and group dynamics, but could be used for non-therapeutic settings and in work contexts. Deep under impression of the second world war and the Nazi-regime, from which she had to flee as a Jew, her overall aim was to assist in creating humane (in the ethical sense of the word) environments, which enable personal growth and living learning as a key to improving society. While the needs of the individual ego and the group are esteemed important, with TCI group processes are focused on the third thing - the theme(topic, issue).

TCI is based upon three basic axioms which form a (kind of) ethical foundation, summarising basic beliefs about the interdependency of humans and the world, about there being no total autonomy but a restricted one, which can grow in power when it knows about this interdependency, about the value of all living etc. Upon this base there is a level of *methodical postulates*, one of (interaction-)methods and last a level of interaction rules. The two postulates are known widely by now and have been adopted by many group methods. „*Be your own chairperson*“ calls upon the individual to be aware of his/her own feelings, needs, and the outer environment and to decide responsible for oneself and others. This implies to perceive and respect others as individuals and to take oneself, others, and the pursuits seriously. The second postulate is „*Disturbances have precedence*“, as hidden disturbances interfere with group processes. They distract, occupy energy and hinder from

being fully present, becoming a hidden agenda. Disturbances have to be noticed, voiced, and - if necessary - cured, in order to enable focused and productive group work.

Dynamic balance

Besides the postulates the next level of (interaction) methods is most important for group moderation. One principle is that in group processes, interests of the *individual subjects (I)*, the *group (We)* and the *theme (It)* must be in *dynamic balance*. This is symbolised by a triangle where individual, group and theme form the points. Whenever one side dominates, there are negative side effects. E.g. when the theme dominates, this may be a sign that people hide problems, individuals may get bored as the theme has no personal relevance, people are so absorbed that they forget basic needs, no group feeling and no personal relationships develop. In We-centred groups, group dynamics govern - group thinking can develop, individual views and needs are suppressed and group dynamics may get so overwhelming that no work is done. The theme gives communication a productive focus, but it must be balanced with the other needs. The „We“ of the group develops from centring around a theme, that is why TCI is termed „theme-centred“.



This calls for group leaders or moderators to balance these three interests and to take care for a process in which theme-centred, group-centred and individual-centred phases alternate.

The theme itself should be designed in advance such that it is not just a rational topic, but has personal relevance. The design of a theme is part of keeping dynamic balance, as it can be seen from its rational side, from individual perspectives and from a group

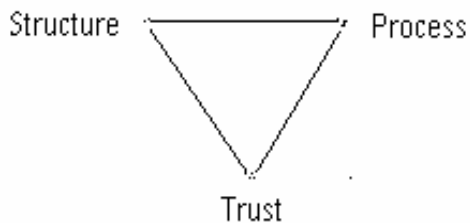
perspective. Formulating themes is a major (and difficult) task for TCI practitioners, as the theme should connect to experience and interests of participants, open up space for discussion and exploration, provide focus, should not determine methods, be adjusted in language and demands to participants and so on.

The triangle itself is stuck in a circle, symbolising the „globe“, that is the surrounding environment or context with its demands and constraints, which effect group work. The globe can create disturbances and it can upset dynamic balance, literally shifting weight to one point of the triangle. Thus one must always be conscious of the globe and the constraints it produces and take it into account.

As TCI expects everyone to be his/her own chairperson (respectively to learn this), everyone should also learn to take care of keeping dynamic balance. Experienced groups may not need a dedicated leader any more, rotating moderation roles. Groups of five and more persons need a leader (leading here understood as moderation and facilitation). If everyone tries to take care of dynamic balance, this takes up too much energy and distracts participants from involvement with the theme and from interaction. If nobody leads, balance will sooner or later get lost. But contrary to other moderation methods, TCI does not expect leaders to disengage from the theme, TCI leaders continue to be participants.

Structure, Process and Trust

The second principle is the interrelation of process, structure and trust. What is meant by this? Carefully designed structure fosters good processes. Trust is a kind of mediating variable and also a result in this relationship. There has to be a dynamic balance between structure and free-flowing, evolving process.



Too much structure, which pinpoints things, pre-structures development, leaving no space for new processes to evolve. Too much structure thus blocks process. Missing structure on the other hand makes people uncertain and feel insecure or confused, blocking process as well. Too much structure imposed by the moderator stifles group dynamics, hindering the group to develop trust into

each other and to engage in community building. Leaving people without structure often makes them feel helpless, either getting quiet and anxious, or getting rebellious (except for experienced groups which manage themselves to build up structure), in both cases not developing trust. Both strict planning and aimlessness (being without any plan) have to be avoided.

The necessary kind of structure for a groups first meeting may be as simple as a round in which everyone introduces him/herself followed by an overview of the plan the moderator has prepared. This structure enables establishment of trust and personal relations, it metaphorically opens a room in which people can move, knowing the rules. Structure thus gets group processes started. It can also give group processes a direction. Which topics are discussed and which methods are used to do this (e.g. whether a lecture is given, sub-groups are made for discussion, creative methods are used, results are visualised for further reference) - all of this affects process. Structure overused can close down spaces, but properly designed, it can open spaces. E.g. it can deliberately give room to the I and We aspects or it can, through planned proceeding and methods, provide a stimulating, lively mix of methods which improves concentration, involvement and creativity. Structure thus can open a productive trajectory and focus on certain kinds of outcome. It renders possible theme-orientation.

Structure is also a help for not getting lost to the process. TCI groups thus usually end longer phases (e.g. a day) with a reflection of the process. If time runs out, this reflection is deemed such important to stop the discussion process, which could be interpreted as imposing structure. Without this reflection, experience would remain unconscious of itself. The group is enabled to evaluate the process and to decide on further proceeding.

Structure can also be necessary for creative processes (whereas popular belief is that structure hinders creativity). Sometimes creative people choose a rigid daily schedule. Many creative methods (brainstorming, morphological analysis, mind mapping) also make use of structures and rules. Structure and routine also can serve to reduce complexity, leaving more energy for important issues and problems. Without routine our everyday life would overwhelm us, because of the countless decisions involved.

Every game has structure, and we all know that this does not hinder having fun. We only need to trust the structures usefulness and sense. Whenever a group moderator excerpts structure, this is not possible without participants trusting him/her. Trust is something very sensitive. Thus structure should be made visible and its rationales explained. This fosters trust and gives people ability to choose, as we do not want people to trust blindly. Sometimes, especially in

beginning situations, there are exceptions to this (detailed) explanation of structure. But these are staged as „experiment“, that is the group is asked to try out the plan of the moderator (which again needs trust into the person and qualification of the moderator) postponing evaluation. This can be a thin line to walk upon. Persuasion to test methods and listening to the groups needs and the groups reflection on tested methods must be in balance, otherwise the group will lose trust in the moderator.

Structure can enable trust, because it gives security, but this structure has to be *adequate* for the particular situation. Then processes get into flow, which again fosters trust. In order to agree on embarking into a process, groups sometimes need the offering of trust-producing structure. The wrong structure can lead to a loss of trust. Thus methods must always be adapted to the situation in a template-like way. TCI makes use of concrete methods which are picked from other approaches and group methods and are adapted to the „spirit“ of TCI and the situation. TCI itself acts rather as a guideline or a compass for assessing and designing group processes, not as a bag of tricks and methods. Deciding on adequate structure places high demands for anyone preparing a session plan following TCI.

The process needs to be reflected by all participants. The group moderator responds to this by making a „rolling planning“. In reaction to the process and in interaction with the group, the moderator re-plans and adjusts. Structure and proceeding are decided upon on a day-by-day basis, taking into account results and processes of each day. Planning must offer a structure to begin with, but it must remain open and flexible. A moderator must also know when to unleash process and let it flow. Best practice methods used by TCI practitioners include routines like starting the day with everyone shortly stating how (s)he feels right now and what his mind is busy with (serving to focus and to give a chance to handle disturbances) and ending the day with a feedback round reflecting the session.

What can we learn from this for CSCW ?

There already exist some links in-between concepts of TCI and CSCW or computer science in general. Some experience in careful design of structure for computer mediated communication (moderated discussion groups) has been reflected by (Peter & Trudy Johnson-Lenz, 1991). Without explicitly referring to TCI, but obviously based upon humanistic psychology, they present an extensive analysis of several years of organising discussion forums online and how carefully designed structures resulted in higher participation and more productive discussion. E.g. they gave each discussion on a topic a fixed number of rounds (within which everybody had only one turn to write) within a fixed time, as experience showed, that otherwise discussions tended to trickle and dissolve. They also used opening and closing ceremonies to focus group energy. Although they even invented small agent (!) programs which took care of inviting quiet people to talk and which announced the nearby end of rounds, their work seems to have been largely ignored within CSCW, perhaps precisely because it concentrated on group processes and not on technology. At the university of Hamburg there is a PhD project in computer science which attempts to use TCI for the reflection of computer-mediated learning processes and the use of computers within lessons (no publications yet). At the university of Darmstadt, a requirements engineering method is evaluated within a PhD project, which uses TCI as guideline for interviews with members of the user organisation. (Weber & Wendland, 2000)

How can we learn from the interrelation of structure and process? The concept of rolling planning indicates that structure needs to be changeable (during process!), configurable, and

open-ended (enabling exceptions and deviations). On the other hand structure is necessary - in group situations it may even be necessary to override unproductive processes, introducing structure and giving a fresh start. Who decides this? The point that structure must be adequate for the particular situation (situated?) also calls for user-configurable structure. There is a need to experiment with structures, learning and adopting from examples. But not every user is capable to choose adequate structure -- TCI acknowledges the ability of everyone to be his own chairperson, whereas at the same time acknowledging that many people still need to learn this.

What does trust mean, when computer systems excerpt structure? In the section on process, structure, and trust it was said that structure and its rationale should be made visible in order to (at the same time) foster trust and enable critical evaluation. Whether it is possible or sensible to have trust into machines itself is highly questioned (e.g. CHI'01 panel on Non-Contractual Trust, Design, and Human Computer Interactions), as trust refers to a belief in the others good will and good intentions with concern to us and to trust in the others competence. A machine has neither will nor intentions. Thus we cannot trust the machine itself, but only the structure and its rationale. Can we accept structure, if we trust in the design of the structure? We would need to know how exactly this structure looks like and why. Besides of laying structure and rationale open, this requires some user qualification to understand and evaluate given structure.

A further difference is that in group leading the moderator should always reflect his/her intentions and be attentive of the group process, adjusting the pre-planned structure according to the situation. With computer systems, the designer of structure is not present any more and his/her ideas and assumptions about group processes have become static. From a TCI viewpoint, a computational system thus should only be used alike a method or technique, which is evaluated and adjusted to the situation, as it cannot replace human facilitation -- it is only a tool.

As disturbances have precedence, they „break“ structure. One has to keep attentive even during routine and formalised action in order to handle disturbances. Thus there is never a static routine or workflow. This is similar to the concepts of articulation work and workarounds pointed onto by many ethnographic work studies.

TCI statements about structure and process are meant to apply to group processes. They cannot straightforwardly be applied to technology design, but they may serve as source for questioning and analysis, inspiring the workshop. Discussion may proceed from the above initial thoughts and questions.

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Unfortunately most literature on TZI up to now has only been published in German – some English web pages I found:

<http://www.tzi-forum.com/english>

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