

**Project Abstract:** It is the goal of this project to create a new research-tool applicable to empowerment and power structures in institutionalized discourses in bio-medicalization. The project focuses on two sites: The diagnosis and therapy-decision-making on ADHD between doctors, parents and minors as patients; and minors participating in Aikido classes. The novelty of the tool lies in the alignment of qualitative and quantitative methods by using focused ethnography and latent meaning pattern analysis to create fractal clusters that encode institutionalized and discursive power and empowerment in ways that can be queried and measured with multivariate vector and cluster analysis.

**Keywords:** ADHD; Biomedicalization; Cluster Analysis; Discursive Institutionalism; Doctor-Parent-Patient Triad; Empowerment; Focused Ethnography; Latent Semantics/Latent Meaning Pattern Analysis; Martial Arts and CAM; Qualitative-Quantitative Methodologies; Power Fractals; Situated Power/Knowledge; Virtual and Visual Ethnography.

**Disciplines:** Sociology of Knowledge, Sociology of Medicine, Social Research (Empirical, Qualitative, Quantitative); Social Studies of Science and Technology (STS); Medical Anthropology (Medical Humanities); Body Culture Studies, Cultural Analysis.

**Institutional Situation and Target:** A variety of funding schemes and sites are possible (collaborators could be included in financing options). The current target focus is the EU Marie Curie Outgoing Fellowship (<http://ec.europa.eu/research/participants/portal/page/people?callIdentifier=FP7-PEOPLE-2012-IOE>), for a 3-year period (2 abroad, 1 in the EU) and a lump sum of 250,000 Euro. In 2011, the applicant entered a suggestion, under the direction of the EU coordinator of the University of Bamberg, Germany with a historical project to be undertaken at Brown University, Providence, RI (USA) and Bamberg (GER). The applicant's concerns over the potential lack of fit of a science-political history project and the program were, however, dismissed by the coordinator. Therefore, in the interest of maintaining momentum, the applicant has now independently created an empirical project that fits the funding scheme. The project's outgoing phase would be hosted by Prof. Ron Eglash, STS department at Rensselaer Polytechnic Institute in Troy, NY. While several EU coordinators of German universities have indicated strong interest, no department could yet be found that fits the project and style while also demonstrating sufficient interest and support for this proposal. The applicant is therefore seeking to find a German or other European partner quickly, given the deadline of August 16 is fast approaching. The application process would involve limited work by the host in the department and some investment of time for the university's research/EU coordinator. The proposal must illustrate both hosts' competencies and resources in providing the career development opportunities required for the project. The bulk of work - writing the actual grant application - would lie with the applicant(s). Research sites would be Troy and NYC, e.g. with already established projects such as AikidoInTheSchools, and where the European host would be located.

**Project Summary:** The goals of this project as created in line with EU Marie Curie grant scheme objectives are two-fold: First, research, and second, career development research-based training. The project design effectively combines both objectives. The project's problem statement is as follows:

The diagnostic/therapeutic decision-making situation on ADHD between doctors, parents, and under-age patients is a complex triadic agency, which can be conceptualized and analyzed through a discursive institutionalism frame along semantic patterns of power, subject to data acquisition through qualitative methods such as situational analysis and focused ethnography. Since ADHD is compatible with the discourse on biomedicalization, the issue of empowerment is a critical aspect for researchers in this area, public health specialists, and (health) policy-makers alike. The situation involving underage patients as a third party against the standard doctor-patient interaction has not been studied sufficiently in general, nor worked with specifically with regards to the issue of power/empowerment. It is suggested in this research project that this situation ought to be investigated according to the dimension of power through an ethnography of the latent semantic patterns that determine the dynamic conceptualizations of health, quality of life, and the body. Semantic empowerment patterns will also be studied ethnographically by following participants in Aikido programs, such as in AikidoInTheSchools. Neurophysiological, cognitive and psychological research has underscored positive effects of martial arts programs for the development of executive functions. Therefore, it is suggested that this 'alternative site' be used to acquire baseline data on empowerment for health, quality of life, and the body, while avoiding the ambiguities and biases of the currently limited discourse on pharmacologicalization versus behavior therapy. Secondly, it is suggested that in order to understand the semantic effect of empowerment in everyday life as a goal and motif for child development underlying ADHD therapy as well as therapeutic participation in martial arts, the latter offers a broader base for integration of the instrument (a semantic analysis scheme) that is supposed to be developed in the course of this project.

In reviewing the semantic patterns of power in the triadic relationship arising in the biomedicalized ADHD discourse and the semantic patterns of empowerment in the aikido setting, while constructing the actors as embedded in a discursively institutionalized life-world, the instrument will be created to look like a latent semantic pattern analysis questionnaire with a Likert-scale measure of power dichotomies. However, the innovative potential of this project lies in the utilization of the form of baseline data gathering and encoding through situational analysis, focused ethnography, and latent meaning pattern analysis (objective hermeneutics). The categories filtered into the instrument are not dichotomous but encode multi-valued and inter-connected clusters, which correspond to the complexities and fractal natures of power and empowerment in the lifeworld and enable a quantitative analysis through multi-factorial, cluster and fractal quantitative analysis, as well as account for analog and digital forms of information (cf. parametric and metric materialities of power). The key innovative power of this instrument lies not only in its potential to develop robust quantitative categories from qualitative data acquisition for a two-step research process, but also in its assertive utilization of recent developments in theory including materialities of power and discursive institutionalism (see: Vivien Schmidt, Laura Hengehold, William Connelly) as well as intensive ontologies (see: Deleuze or Serres), and higher order information theories (Francis Heylighen) or bioinformatics that are here for the first time effectively translated and implemented in a robust instrument that allows for the creation of data that can achieve quantifiable comparative results.

For the EU funding, it is imperative to note that the hosts for this project will be shown to be involved in the development of this instrument and portrayed as agents who have the competencies to further train the applicant in the qualitative and quantitative areas, such as situational analysis, ethnographies (involving also visual and virtual data), fractal information, multivariate and cluster analysis, semantic analysis. The main factor determining EU funding is the career development opportunity made available to the applicant, notwithstanding the other goals or exigencies of the project.