ESSAY

# On Anomalistics Research: The Paradigm of Reflexive Anomalistics

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Abstract—Scientific anomalistics sees itself as a content-determined and delimited area of science committed to the application of appropriate scientific methodology, as well as to generally accepted, and necessary, scientific control mechanisms. The specification of research subjects is not the result of assignment to groups of phenomena of specific scientific (sub-) disciplines, but of the ascription of an anomalistic character, which (at first) makes these phenomena, or experiences, a subject of anomalistics research. Accordingly, anomalistics is not characterized by its own specific methodology but is oriented by the requirements of the respectively concerned discipline(s) (physics, chemistry, biology, psychology, sociology, science of history, etc.). For a long time, (natural) science approaches have been considered paradigmatic for anomalistics research and for parapsychological research in particular. However, during the last few decades, social-scientific approaches and qualitative research methods have become increasingly important as supplementary and alternative methods. As a result, single case studies and the investigation of ostensible spontaneous psi phenomena have lost their often premature reputation of being unscientific. Qualitative research methodology, which is used predominantly in social and cultural sciences as well as in anthropology, now represents a useful supplement to guantitative approaches. In some cases, and for several research guestions, it proves to be ultimately superior, because one can avoid the considerable reduction of complexity that is obligatory in quantitative methods. Therefore, the research, as well as the researchers, can come much closer to livingworld manifestations of anomalistic phenomena and experiences than is the case with the relatively artificial situation in laboratory experiments. As we are trying to demonstrate in our paper, anomalistics research should be

conducted in a reflective manner under the described paradigm of reflexive anomalistics. The term signifies a social-scientific informed approach to anomalistic phenomena that is aware of (a) the epistemic particularities of the phenomena under research, (b) the precarious cultural (media, science policy) framework conditions of this research, and (c) the areas of tension between subjective evidence, scientific proof, and social discourse. These factors have to be systematically taken into consideration when developing scientific research questions as well as methodological approaches.

#### Introduction: Qualitative and Quantitative Psi Research

One of the most salient developments in parapsychological and anomalistics research in the last few decades has been the growing awareness of qualitative research methods as instruments for gaining scientific knowledge within the fields of parapsychology, and anomalistics in general, as well as the increased selection of social science approaches in addition to traditional scientific and psychological ones. These approaches are certainly not new but have been present throughout the whole history of parapsychological research (cf. Zingrone, Alvarado, & Hövelmann 2015). However, quantitative experimental laboratory research has long been regarded as an ideal approach in psi research.

## **Efforts toward Normalization**

This experimental approach could be considered to result from parapyschologists' endeavors to establish parapsychology as a "normal" academic discipline, and to deal scientifically with paranormal phenomena and psi as if they were conventional objects of investigation that do not differ essentially from those in mainstream science. This development was initiated by the American biologist and parapsychologist J. B. Rhine in the 1930s. His experimental laboratory psi research using "normal" research participants (students, etc.), as is the case with many other branches of academic psychology, marked the end of an era of qualitative psi research with gifted mediums as participants, as well as in-depth single case studies of psi phenomena (cf. Alvarado 1996b, Zingrone & Alvarado 2015). The aim of approximating hard science as closely as possible by adopting its research methodology in order to be taken seriously as a serious, academically based research program has been successful-at least to a certain degree (Dean 2015, see also Irwin & Watt 2007:247-262, and Zingrone 2002). However, it has resulted in a substantial narrowing and specialization of the field of research. The psi phenomena under investigation in laboratories differ significantly from those experienced in everyday life. The obligatory strict control of the experimental conditions and of the parameters considered relevant can only be achieved with a significant reduction in the complexity of the investigated phenomena (e.g., Alvarado 1996b, Kelly & Tucker 2015:65, Mayer & Schetsche 2012).

This emphasis on experimental laboratory research has led to a large body of evidence that has to be assessed as undeniable anomalies, or, as Stefan Schmidt put it: "In parapsychological experiment data, irregularities can be found which cannot be explained by chance; little is known about the nature of these irregularities" (Schmidt 2014:103, translation from the German by G.M.). In this respect, the concentration on laboratory experiments and the narrowed focus have been useful strategies.

### **Discourses of Demarcation**

However, this strategy widened the gap between laboratory research and the investigation of psi outside the laboratory, and, furthermore, between parapsychology and other branches of the field of anomalistics in general. For many researchers in parapsychology, only anomalies that could be conceived by a limited number of operationalizable variables had been of scientific interest, insofar as they could easily be made the subject of such research approaches. The investigation of spontaneously occurring phenomena-many anomalistic phenomena belong to this category-as well as single case studies outside the laboratory, had only been seen as being of illustrative or anecdotal use (Alvarado 1996a:3-5, Kelly & Tucker 2015:65, Rhine 1977:77). In addition to the above-mentioned distinction of "clean" experimentally accessible psi phenomena and rather "dirty" ones in the living environment, further discourses of demarcation occurred: between "good" parapsychology and other rather "feeble" fields of anomalistics such as ufology, astrology, cryptozoology, and diverse Fortean phenomena.<sup>1</sup> However, from the perspective of (scientific) anomalistics, paranormal phenomena as investigated by parapsychology, and by laboratory experimental parapsychology in particular, represent only a partial area of the whole field of interest. Several phenomena in anomalistics are basically not, or only partially, accessible to experimental investigation.

#### **New Perspectives**

Since experimental parapsychological research has generated a comprehensive base of evidence (Broderick & Goertzel 2014, Cardeña, Palmer, & Marcusson-Clavertz 2015, Irwin & Watt 2007, Krippner & Friedman 2010, Radin 2006, Schmidt 2014) that allows informed and unprejudiced experts to be convinced of the reality of psi, or at least of the existence of anomalies that cannot be explained by the known laws of nature (cf. Irwin 2014), research carried out during recent decades has increasingly moved from a proof-oriented (evidential approach) to a process-oriented direction, which has drawn attention to contextual conditions.<sup>2</sup> Therefore, qualitative single case studies have again taken on greater significance (e.g., Alvarado 2002, Mayer & Schetsche 2011, Stokes 1997). A decisive innovation of parapsychological research is the integration of new research methods that have been developed in social sciences and anthropology (cf. Kruth 2015, McClenon 2001, Zingrone, Alvarado, & Hövelmann 2015). Their application has led to a significantly more reflective treatment of qualitative data in particular, as well as methodological and knowledgesociological issues in general, and has considerably expanded the range of potential advancement of scientific knowledge from such data.<sup>3</sup> This applies to the (qualitative) data of all scientific disciplines in general when human individuals build a relevant part of the data collection (i.e. when human participants, interviewees, etc., are part of the study design), but especially to anomalistics because this research field features some essential particularities.

These particularities are determined by the nature of the research topics, which, on the one hand, have led to well-known methodological and conceptual problems such as insufficient replicability, but have, on the other hand, become relevant on completely different levels. Practically all active researchers in the field of anomalistics have been confronted with these difficulties. Attacks by skeptical scientific colleagues that are directed toward the research work *itself* in this area are as old as the history of "scientific occultism" (e.g., McClenon 1984). However, from the perspectives of the science of history and the sociology of science, the skeptic movement is primarily an indicator of the peculiarity of the research topics, which is expressed on different levels and considerably influences the process of research. Nevertheless, many researchers-especially those who are familiar with social and cultural sciences and have included these research areas in their range of interest—are aware of this, and, accordingly, take the specific conditions in the field of anomalistics into consideration (e.g., Machado 2009).

# Anomalistics as a Research Field: The Paradigm of Reflexive Anomalistics

Anomalies are phenomena and/or experiences that seem to conflict with "certain very general principles" (Broad 1962:3) which are accepted by science as well as in everyday life during that respective period in time. The English philosopher of science C. D. Broad called them "*basic limiting principles*," which build unhesitatingly, and in a self-evident manner,

the framework of our everyday practice as well as of generally accepted scientific theories (Broad 1949, 1962:3–6). These limiting principles imply, for example, that rivers do not run uphill, that future events cannot be predicted with complete certainty, and that inanimate objects do not move by themselves. Some of these principles, says Broad, seem to be self-evident, and others are "overwhelmingly supported by all the empirical facts" (1949:291). It would be regarded as absurd to consider them critically, at least with regard to practical everyday activities as well as conventional scientific research. Anomalies, however, can bring these principles into question, and assessing or refining them can be a natural focus of anomalistics research.<sup>4</sup>

In our opinion, anomalistics is not a separate academic discipline but builds a content-determined *field of research* because anomalies can basically occur in all areas of science. There is no clear-cut and undisputed definition of what exactly defines the subject area of anomalistics (cf. Bauer 2015:74), because anomalies, in a broad understanding, propel many scientific efforts aimed at integrating hitherto non-understood phenomena (anomalies) into the canon of scientific knowledge. Accordingly, some authors distinguish different kinds of anomalies. Sturrock (2010), for example, differentiates between "OK anomalies," "not-OK anomalies," and "sleeping anomalies." The first group seem to be solvable within the framework of conventional science, the second seem to be unsolvable with conventional scientific models, and the third group contains anomalies for which it so far remains uncertain whether they are accessible to scientific investigation at all. Atmanspacher (2009:280) emphasizes the potential connectivity with accepted knowledge and distinguishes, quite similarly, "anomalies at the frontier of accepted knowledge," "anomalies surrounded by accepted knowledge (interior anomalies)," and "anomalies in no man's land" (cf. Hövelmann 2015).

With this paper, we present an analysis of the specific conditions of anomalistics research that we systematize under the paradigm of *reflexive anomalistics*.<sup>5</sup> In our understanding, reflexive anomalistics means a *social-scientific informed* approach to anomalistic phenomena that provides specific basic rules for the investigation of extraordinary experiences and phenomena. The specifying adjective *reflexive* signifies a main objective of research, which is awareness of (a) the epistemic particularities of the phenomena under research, (b) the precarious cultural (media, science, policy) framework conditions of this research, and (c) the areas of tension between subjective evidence, scientific proof, and social discourse, and which takes these factors into account, systematically and from the beginning, with regard to the scientific research question as well as the methodological

approach. Each of these factors leads to specific methodological problems that have to be considered in anomalistic research. Not only should epistemic issues and the sociology of knowledge be part of scientific anomalistics, but media thematization, as well as its psychosocial, or knowledge-concerning consequences for potential and actual interviewees, should also be taken into consideration. Finally, the phenomenological particularities of this research field, which are reflected in data gathering as well as evaluation, have to be kept in mind. We will explain this in more detail below.

### **Epistemological Particularities and Their Impact on Methodology**

#### Anomalistic Phenomena in Experimental Laboratory Research

"Classic" psi phenomena such as clairvoyance, telepathy, precognition, and psychokinesis belong to the class of anomalies that can be investigated in laboratory experiments. Despite sound evidence of the occurrence of anomalies in the data that have appeared in the meantime (cf. Schmidt 2014 for an overview), the phenomena resist treatment as a "normal" research topic because they cannot be reliably replicated under controlled conditions (Edge & Morris 1986:318-319, Schmidt 2014:101-102). The elusive nature of the phenomena is certainly one of the reasons why there are indeed several theories but none that would find undivided support within the scientific community (cf. Schmidt 2015). Both theory construction and experimental methodology are required to take this peculiarity into account. At the theoretical level, this is done, for example, with attempts at modeling such "unreliable" behavior of the phenomena by referring to the laws of quantum physics (cf. Millar 2015), as in the case of the Model of Pragmatic Information (Lucadou 1987, 1995a, 1995b:139-155) and Weak Quantum Theory (Atmanspacher, Römer, & Walach 2002, Walach, Lucadou, & Römer 2014). In statistical evaluation, the replication problem is addressed insofar as one can achieve a "second order replicability" with the use of metaanalyses, and by the accumulation of findings that relativize the problem of "classic" replicability (first order) (cf. Utts 2015, Tressoldi & Utts 2015). Even in the field of experimental methodology, the elusive nature of the phenomena can be operationalized using a theory-driven approach, as was recently achieved by Lucadou with his Correlation-Matrix Method (CMM), which has since been successfully tested (cf. Walach 2014, Walach, Horan, & Hinterberger 2016).

In addition to the replication problem, *experimenter effects* represent a further problem that has been discussed in experimental psi research for a long time. The observer invariance required in experimental research is undermined by the finding that some experimenters obtain significantly stronger psi effects with their experiments than others using an identical experimental design and environment (cf. Watt, Wiseman, & Schlitz 2002) and by the experimenter effect in general (Palmer & Millar 2015).<sup>6</sup>

Even if one is able to experimentally register anomalies like the above-mentioned "classical" psi phenomena by means of sophisticated methodological designs and statistical evaluation, it must be stated that the effect size of psi obtained with such methods is very small (see Schmidt 2014:99 for an overview)—so small that they should not play a significant role in everyday life. At the same time, there are reports from everyday life that describe the experience of such phenomena of an enormous, and sometimes existentially shocking, severity, compellingly raising the questions of construct validity and ecological validity of experimental laboratory psi research (cf. Alvarado 1996b, Braude 1997:4-14, Mayer & Schetsche 2012). Braude (1997:10) notes that laboratory conditions are so different from conditions in everyday life that experiments on human cognition and behavior can generally only be conducted in a meaningful way with great reservations.<sup>7</sup> This applies particularly to parapsychological experiments because, according to a common assumption (e.g., Irwin & Watt 2007:129ff, McClenon 2005, Stanford 1990), the psi ability of human beings is extremely dependent on situation and context; it occurs mainly in emergency situations ("need-determined") which can hardly be simulated in a laboratory.8 Nevertheless, an increasing orientation toward the investigation of anomalies as they occur in the "natural" living environment is promises a considerable increase in knowledge that can stimulate theory construction and also be of value for process-oriented experimental research.

### Anomalistic Phenomena in Field Research and in Interview Studies

The epistemic particularities of anomalistic phenomena in the living environment can be found on various levels to be partly related to each other. Anomalistic phenomena (a) occur spontaneously in most cases<sup>9</sup> and are therefore not available for scientific investigation at will; they are not inducible and cannot be scheduled (Alvarado 2002, Mayer & Schetsche 2011:12–13, Rush 1986).<sup>10</sup> As a consequence, they are (b) mostly not directly observable but only available as recollections; that is, they are available to the researcher as *subjective experiences* and have taken the form of experiential reports (recollected perceptions and experiences), for example reports of ghostly apparitions, synchronistic events, and out-of-body experiences. With prolonged events such as, for example, a typical poltergeist case, but also with intersubjectively shared observations like a collective UFO sighting, the investigators have to deal with (c) an *experiential context of high complexity* that includes more than one witness, and maybe a substantial amount of physical traces. Finally, there are (d) singular cases that have to be seen as *structurally, or historically, unique*. Examples are: the "red rain of Kerala," a reddish precipitation that fell sporadically in the Indian federal state of Kerala during the period between July and September 2001 (Gangappa & Hogg 2013, Louis & Kumar 2006), as well as the "Tunguska event," an explosion in Siberia in 1908, the cause of which has still not been determined beyond doubt (cf. Rubtsov 2009). These four characteristics prevent an approach exclusively oriented to natural scientific, or quantitative–psychological, methodology, even though laboratory tests (e.g., of material samples) can play a significant role in field-based, single case studies.

Multi-Methodological Approach. Three preferred methodological settings result from the above-mentioned particularities: field-researchbased, single case studies (with regard to anomalistics, cf., e.g., Kelly & Tucker 2015, Mayer, Gründer, & Schetsche 2015, Mayer & Schetsche 2011),<sup>11</sup> interview studies (e.g., Schmied-Knittel & Schetsche 2015), and surveys (for an overview, cf. Kelly & Tucker 2015:67-68; see also West 1993).<sup>12</sup> The diversity of anomalistic phenomena under investigation makes it almost impossible to make generally valid statements on the research methods to be used. This is because the aim of the research, as well as the methods to be chosen, may vary considerably depending on the research object. Investigations of the above-mentioned examples of unique cases may be highly proof-oriented and object-centered, and apply the research methodology of (physical) science (is it actually a scientific anomaly not yet understood, or can it be sufficiently understood within conventional models of explanation?), but once we have to deal with witness statements as a data source, social-scientific, person-related, and process-related aspects come into effect. According to the structure of a case, a multi-methodological approach will be indicated which generates various kinds of data. In a poltergeist investigation, for example, one usually has to deal with interview data that are supplemented with data from observations, measurements, and documentation that can be collected during location surveys (photographs, quantitative physical measurement data, etc.), as well as diary accounts and data from historical enquiries. In some circumstances, laboratory tests of physical objects can be necessary or useful in order to gain additional evidence for the assessment of the events (to confirm a conventional explanation or the presence of an anomaly).

With such a multi-methodological approach, case studies in anomalistics do not differ from those in other fields such as criminology. In both cases, techniques of conducting and evaluating interviews, psychological aspects of witness testimonies, and questions of fraud and self-deception play important roles. Here, too, a particularity arises only through the specific nature of the phenomena that conflict with *basic limiting principles*. Because such anomalies belong, admittedly, to a culturally handed down (through fairy stories, myths, and fictional works) body of knowledge but are in conflict with the publicly dominating physicalist–materialistic worldview in Western modern societies, communication about such phenomena and extraordinary experiences (ExEs) is subject to particular rules that have to be taken into account methodologically (this will be discussed below).

Distorted Image of Science. Anomalistic research is often faced with another particularity: confusion caused by a false, or distorted, image of science held by people involved in a case (e.g., of poltergeist phenomena), and who often have erroneous expectations with regard to appropriate methods of investigation. In most scientific areas, this point is not controversial-sociologists do interviews and deal with survey data, biologists and chemists operate with test tubes, microscopes, and analyzers, etc.--but such clear referential ideas (e.g., applied in school education) are lacking in anomalistics. Thus, the idea of scientific investigations of anomalies is normally mediated by media, but also by scientific laypersons, and oriented on a scientific methodology of objective measurement with technical instruments. This is clearly displayed, for example, in the approach of high-tech, ghost-hunting groups (Mayer 2013a).<sup>13</sup> Indeed, efforts also have been made by professional anomalistic researchers in spontaneous cases to obtain a complete recording of all possible environmental data, as well as data directly concerned with phenomena (optically, acoustically) by using the largest possible collection of measuring instruments. However, the extensive deployment of technology has not proved particularly worthwhile to date, and most experienced ghost investigators with an academic background have become skeptical of using technology in this way (cf. Cornell 2002:377-381). An indirect, person-oriented, and process-related approach seems to be less spectacular, but currently appears more promising against the background of long-term, phenomenon-oriented research thanreturning once again to the example of haunting investigations-roving through allegedly haunted ruins armed with various measuring instruments and recording tools, as is practiced by ghost-hunting groups. Their idea of a potential physical-technological detection of ghostly apparitions results from a scientifically highly dubious interaction model, but it is adapted to lead the concerned lay investigators to a belief in a delusional "objectivity" of the instrumentally based findings (Mayer & Schetsche 2011:97). Accordingly, other methodologies, that is to say valid and epistemically well-considered methods of (social) environment research, are of particular importance for many anomalistic case studies.

Models and Methods. In anomalistics, it is particularly apparent how strongly theoretical presuppositions and models shape the methodology, and the degree to which the chosen method depends on the respective ideas of the researcher about the (ontological) nature of the phenomena under investigation. This point is trivial as such, and seldom leads to considerable differences with research issues in conventional scientific areas, especially in the natural sciences, so that controversies occur over methodological questions of detail at most. Therefore, this point is rarely considered. In anomalistics, there is basically no lack of (serious) theories<sup>14</sup> but rather of a basal consensus in the modeling and understanding of extraordinary events and experiences (e.g., Edge & Morris 1986:312-314). Depending on ideological attitude, different research focuses are emphasized, which mostly affect the research methodology (e.g., selection of measuring instruments, interpretation of collected data). The research methodology is often influenced by implicit or explicit theoretical or perhaps empirically driven presuppositions-if, for example, an assessment of the "genuineness" of the phenomena is made on the basis of a structural correlation, or accordance, with accustomed or cherished models. The detection of an "affective field" (Bender 1964)<sup>15</sup> or a dysfunctional family structure is then considered to be a strong indicator of the possibility of genuine anomalies, whereas their lack gives rise to deep distrust. The same applies to the elusiveness of the phenomena: If during an investigation of a poltergeist case psi phenomena continue to occur after the arrival of the investigators, this is interpreted as an indication of fraud.<sup>16</sup> With regard to the narrative structure of reports of ExEs: If, for example, an account of a near-death experience does not display the typical and well-known features (tunnel, bright light, etc.) of such reports, it is likely to be interpreted as confabulation, or a conscious attempt to cheat.<sup>17</sup> Although such models provide cognitive landmarks on the "swampy ontological ground" of anomalistic phenomena that seem to be, as structures of rationality, reasonable criteria for the selection of research methodology (aims, measuring instruments, etc.), it must not be overlooked that these are inevitably reductionist approaches,<sup>18</sup> and one thereby runs the risk of narrowing the perspective too far and overlooking essential aspects—a risk that might be bigger in the field of anomalistics than in other research fields.

In many cases, it will therefore be useful to choose an explorative, data-guided research strategy in the sense of a qualitative and interpretative social research (cf. Flick, Kardoff, & Steinke 2000, Strübing & Schnettler 2004). With such an approach, methods are provided that observe a principle of openness and postpone consideration of the theoretical structure of the research object. Thus, the emergence of its inherent structure is facilitated (cf. Hoffmann-Riem 1980:343). This general relinquishment of theoretical presuppositions about the research object and, therefore, the nature of the interviewees is crucial when the research topic relates to heterodox worldviews.

American-style, ghost-hunting groups represent a good example of how fundamental (theoretical or ideological) preconceptions influence the methodological approach. Spiritual, religious, or spiritualist basic assumptions that are rarely questioned form the basis of their work, accompanied by the idea that ghosts or paranormal phenomena manifest themselves on a physical level; that is, that they have an effect on measuring instruments of any kind so that anomalies can be detected in measurement data. The more physical parameters measured, the more likely it is that some "anomalies" will be detected, which can then be interpreted as an effect of the transcendent on the physical world. For this reason, these groups are technically extensively equipped: video and audio recordings are made, and various physical parameters (geomagnetic field strength, temperature, air pressure, atmospheric humidity, noise, light) are measured at a supposedly haunted place. The collected data are then jointly analyzed and examined for conspicuous structures. This approach can be characterized as being positivistic and almost physicalistic: Ghosts manifest themselves physically, and they are detectable physically with the respective measuring instruments. Accordingly, technical devices are indispensable tools for creating evidence:

The technology itself is celebrated, promoted, and sold on sites professing to lead the practice of 'high-tech ghostbusting.' This latest version of techno-mysticism fuses a feeble-minded mysticism (as cited above) with a fetishizing of the technology itself. (Potts 2004:221)

However, if the basic assumptions of the physical manifestation of ghostly entities are rejected,<sup>19</sup> the measured "evidence" of the paranormal quickly becomes evidence of the investigators' faith in technology. In most cases, there are numerous alternative explanations of the identified anomalies in measurement data available. Instead of making use of ghosts, it is then sufficient to move around in a "normal"—in a double sense—research area with fluctuating environmental factors.

#### **Precarious Cultural Framework Conditions**

A core problem of anomalistic research is that anomalistic phenomena have been, and still are, the subject of highly controversial public debates, as well as systematic attempts at deconstruction (cf. Schetsche 2015). For example, the dealing of the mass media with this topic area is characterized by different strategies of de-legitimization: If the mass media cover such issues at all, the respective experiences and phenomena are often ridiculed, or mitigated through *selection of facts* and *re-interpretation* (cf. Mayer 2003), or neutralized through *fictionalization* by locating them in the fantasy genre.

# **Nihilation Strategies**

By means of nihilation strategies, (empirical) knowledge that contradicts the accepted order of reality is argumentatively rejected—often with the aim of eliminating it from the culturally recognized "inventory of knowledge about reality" (cf. Berger & Luckmann 1991:132–134). Such nihilation strategies (cf. Schetsche 2015:65–67) are:

- ridiculization and disqualification of individuals and interpretations. Individuals who report ExEs, or who deal with anomalistic phenomena, are ridiculed by means of various language strategies, or critical features in their environment are sought out in order to disqualify them as serious witnesses/scientists/interviewees (see also Edge & Morris 1986:322, Mayer 2003:22–25).
- delegitimization by reproductions. Artificial events (as pseudo-phenomena) are created that simulate anomalistic phenomena (e.g., photos or videos of UFO sightings, appearances of ghosts, crop circles) in order to prove that such phenomena can be human-made and hence are humanmade; therefore, further clarification of such phenomena is not required.
- **epistemic extinction** by concealment. This strategy can mainly be found in science. By way of mechanisms of scientific self-control (research funding, peer review processes), findings or theoretical interpretations that deviate from scientific orthodoxy are prevented from reaching an expert audience or cannot be produced at all due to the withholding of financing.<sup>20</sup>
- pathologization of experiences. Attempts are made to neutralize anomalistic phenomena by interpreting them as an expression of a mental disorder. For example, in the context of the diagnosis "schizotypal personality disorder," extraordinary experiences are declared to be the core indicator of a psychological disorder (cf. Schetsche 2013b).

If, therefore, someone experiences something that is difficult to explain, and perhaps even contradicts the fundamental rules of the scientific order of reality, then he or she is put at risk of social stigmatization or, at worst, pathologization (cf. Schetsche 2013a). Diagnoses of the above-mentioned kind signal to individuals as well as to society that it is precarious to communicate about ExEs and paranormal interpretations. The same also applies to the sciences: Someone who deals with ExEs and anomalistic phenomena in an open-minded manner jeopardizes his/her reputation and career (cf. Hess 1992, Cardeña 2015, Schetsche 2015). From a methodological viewpoint, knowledge in the lifeworld and in science about the heterodox status of ExEs creates a double hiatus: just as it prevents scientists from dealing scientifically with respective phenomena, it causes concerned individuals to hesitate before speaking openly and honestly about their experiences and personal interpretations. The latter is reflected in the specific strategies of communication used when dealing with such experiences.

# Communication about Anomalistic Phenomena and Extraordinary Experiences

Reporting ExEs, as well as talking about this issue in general, always makes a self-positioning toward the "extraordinary" necessary (Schäfer 2012:234). Three factors play a crucial role in communication about ExEs: communication in a specific "secure mode," social desirability, and social distinction.

Shielded Communication. Schmied-Knittel and Schetsche (2005, 2015:436-438) have demonstrated that individuals report ExEs in a particular way that they characterized as a mode of "shielded communication." The background of this frequently occurring specific secure mode of speech about personal experiences is the knowledge, or the premonition at least, that they have dared enter into an area of "special knowledge" that is in contradiction to the dominant scientific worldview, and that therefore their experiences could be regarded as deviant in our society. They know that proponents of paranormal interpretations are regularly exposed to ridicule by public media, and, in some circumstances, can be classified as in need of therapy and, at worst, psychiatrized (cf. Schetsche 2013b, Wooffitt 1994). This style of "shielded communication" is characterized by different strategies, such as the repeated assurance that one is neither crazy nor naïve, assuring that one's powers of recollection are excellent, argumentatively eliminating other logical possibilities of conventional explanation, citing witnesses, and referring to (scientific) "experts" of the paranormal. Such strategies do not necessarily have to be explicit. They can be assimilated into the very construction of the narration (Bender 2007, Childs & Murray 2010, Lamont 2007, Wooffitt 1991, 1992).<sup>21</sup> Bender (2007:214) demonstrated, with regard to interview studies of ExEs in general, "how account and experience are tied together in a complex relation to each other, and to the embodied cultural and social worlds in which they are experienced and expressed." The same applies to a comparative field study by Cassaniti and Luhrmann (2011, 2014) on the cultural interdependence of accounts and experience, as well as of the likelihood of having such ExEs.

Social Desirability and Distinction. With her impressive field study of

magic practices in northwestern France, Favret-Saada (1977) demonstrated that the interviewed person initially scrutinizes the interviewer's attitude toward the contents to be reported, as well as his/her ideological positioning. They then tend to shape their narration according to the anticipated expectations or attitudes. If there is no observable openness by the interviewer toward the possibility of the existence of paranormal phenomena in principle, this will have an unfavorable influence on the conversational situation in general, and on the quality of the obtained data in particular. ExEs are potentially relativized, reported in a biased way, or possibly completely concealed to avoid the danger of social stigmatization, or even just an implicitly pejorative attitude of the scientific investigator.

However, biased accounts may also be elicited under the condition of an observed openness of the conversational situation. When dealing with ExEs, we must make reference to the dimension of normalization versus "especialization" (to become someone special). The particular quality of ExEs allows them to be used for the biographical construction of identity, as Schäfer (2012) has shown in a study of the biographical integration of ExEs. Both strategies can bias the narration for the purpose of selfstyling: normalization as a means to avoid the impression of arrogance, and especialization as an expression of one's own special role and meaning as a person being distinct from "normal people."

Anyone who ignores these culturally precarious framework conditions of the research field runs the danger of producing various kinds of artefacts in the data as well as in their interpretation.

# Complex Entanglement of Subjective, Intersubjective, and Objective Evidence, and Social Discourse

In the living environment, accounts of ExEs are the main data source of scientific knowledge: retrospective narrations of what the concerned persons experienced a short or longer while ago, or more correctly, what they *reconstructively remember* to have experienced at the moment the statement is made.<sup>22</sup> In addition, the experience has to be culturally encoded (verbally, epistemologically, and often normatively) in order to be communicated at all. Accounts of such experiences are, therefore, pre-shaped, not only by individual processes of interpretation and memory, but also by social interpretive patterns, norms, and not least, epistemic basic rules. A closer look at the term "experience" and its different meanings should be helpful for the understanding of these processes.

The German language differentiates between *Erlebnis* and *Erfahrung*. The first term indicates experience in the sense of a purely individual impression—immediate or lived experience; while the second refers to

a social form of experience based on shared knowledge—interpreted or coherent experience (Bauman 2008, Junge et al. 2008:17). *Erlebnis* and *Erfahrung* have to be distinguished from an *event* that indicates an incident, a fact, an occurrence whose existence is *thought of* as independent of human perceptual experience (even though a direct or indirect human observer is needed to record it as scientific data). Accordingly, *Erlebnisse* produce subjective evidence, *Erfahrungen* intersubjective evidence, and *events* objective evidence (cf. Mayer & Schetsche 2012, see also Cardeña, Lynn, & Krippner 2000, with regard to a differentiation between "experience" and "event").<sup>23</sup>

Accounts of ExEs mainly consist of verbally expressed *Erfahrungen*. Thereby, culturally pre-shaped narrative structures become essential for the communication of personal (non-communicable) Erlebnisse. While forms of Erfahrung can be studied easily by researching the development of narratives or the reconstruction of cognitive concepts, the biographical moments of evidence (as Erlebnis) often are embedded in commonly shared narratives. To illustrate this by way of an example: In neopagan religion, and especially in Wicca, the so-called "coming home experience" is a widely spread type of conversion narrative. It refers to the spiritual experience of a feeling of coming home (to the Goddess, to where humanity started, to your true self, to where you always have been but did not know it, etc.) and has virtually gained the status of a theological principle. This narrative, with its serial character, has taken on a life of its own as an "identity module" narrative. It is expected that personal ExEs are understood as important parts of such spiritual developments, and thus embedded into accordingly pre-shaped narratives. Thus, the particular individual "experiences of evidence" have often become obscured. This problem concerns interview studies and field investigations of ExEs in general. If the researcher is not only interested in the question of the knowledge of particular narratives that are applied to particular contexts, but also in the underlying personal (lived) experiences, and possibly even in the actual events that caused the ExEs, then he has to deal with this obscuring effect (Mayer & Gründer 2010, 2011).24

Which ExEs *can* be reported at all, in which terms, and on what basis of interpretative framework, is therefore always dependent on cultural discourses that deal with issues of the admissibility of particular thematizations within the accepted order of reality (the so-called epistemic regime of a culture). Thus, it depends on the respective cultural conditions *if and how* extraordinary *Erlebnisse* will be transformed into intersubjectively communicable *Erfahrungen*. During the scientific analysis of such experiential reports, the experience of subjective evidence that is culturally

preformed has to be filtered, edited, and reformulated in order to become scientific knowledge. Between the evidential experience of the individual and scientific evidence, there are, therefore, at least two inevitable thresholds of knowledge that must be surmounted in a methodological and deliberated way. In addition, there are various social (political, economic, religious, etc.) influences on research, and, furthermore, researchers are not free from their own interests, ideological limitations, and ways of thinking related to the zeitgeist. Particularly with the investigation of culturally controversial phenomena and experiences, which belong to the heterodox segment of the accepted order of reality, relevant influences on single scientific findings, as well as on the scientific world view in general, have to be taken into account analytically.

Being aware of the specific conditions in anomalistic research—to repeat the three main areas once again: (a) the epistemic particularities of the phenomena under research, (b) the precarious cultural (media, science policy) framework conditions of this research, and (c) the areas of tension between subjective evidence, scientific proof, and social discourse—and taking them routinely, and as a matter of principal, into consideration, characterizes an approach that can be aptly referred to as reflexive anomalistics.

### Notes

- <sup>1</sup> It would be an interesting research issue itself to examine the degree of acceptance of various kinds of anomalous experiences, such as near-death experiences, mystical phenomena, or cases of possession, by parapsy-chologists and other anomalists, i.e. to scrutinize which characteristics make a field of anomalistic phenomena regarded as a "feeble" one.
- <sup>2</sup> However, process-oriented research is not a relatively new development but has been done since the early times of the *Society for Psychical Research* (Alvarado 1996a).
- <sup>3</sup> See Kruth (2015) for a short overview of several common qualitative research approaches, their differences from quantitative approaches, and the contexts of application.
- <sup>4</sup> It should be added that definitions of anomalies, especially anomalous experiences, are highly culturally dependent, of course.
- <sup>5</sup> The paradigm of reflexive anomalistics has been introduced by one of the authors (M.S.) of this paper, and was first presented in the context of a partial area of anomalistics, UFO research (Schetsche & Anton 2013). A "Manifest für eine reflexive UFO-Forschung" [Manifesto for a Reflexive U.F.O. Research] resulted from this (Anton, Hövelmann, & Schetsche 2013). An extension of the paradigm to the whole field of anomalistics

was made in Mayer, Schetsche, Schmied-Knittel, & Vaitl 2015 and in Schetsche, Schmied-Knittel, & Anton 2016).

- <sup>6</sup> It should be mentioned here that this problem with replicability as well as the experimenter effect are now known to not only apply to anomalistics. While the former has reached public debate (Open Science Collaboration 2015), the latter would, if taken seriously, severely unsettle the foundations of scientific work because the possibility of an experimenter effect would also compromise the conclusions of all conventional experiments.
- <sup>7</sup> With their analysis of verbal statements during "ganzfeld" ESP experiments, for example, Wooffitt, Holt, and Alliston (2010) showed impressively that the significance of the laboratory environment as a contextual factor remains underestimated. This produces an overestimation of the validity of verbal statements as "objective," and therefore seemingly reality reproducing, data. Thus, it can easily lead to an overgeneralization of the scope of the results:

The analyses presented here suggest that mentation narratives are not merely neutral verbal expressions of inner mental phenomena that, more or less, capture conscious experience in flight. They are a series of discursive acts through which participants pragmatically address institutional, interpersonal, and inferential contingencies of the setting. What counts as inside the head is a product of the discursive management of the social outside. (Wooffitt, Holt, & Alliston 2010:15)

See also Alvarado (1996b) for problems with, and limits of experimental laboratory research in parapsychology.

<sup>8</sup> As Alvarado (1996b:15) aptly puts it:

In short, I would like to state the obvious: To understand the spontaneous we need to study the spontaneous. There can be no substitute. Unfortunately, most of the research conducted in recent years has neglected the obvious.

However, there are theories that contradict the idea of the need-determined character of psi, such as, for example, Carpenter's *First Sight Theory* (Carpenter 2012).

<sup>9</sup> We would like to thank anonymous reviewer "C" for the following important note, with which we absolutely agree:

It should be noted that the term 'spontaneous' here may merely reflect our ignorance about the true aetiology of the phenomena in question, and is not to suggest that it happens without triggers as in the spontanous decay events of radioactive substances; hence, there is a prospect in principle that in the future these phenomena could be studied in a more 'controlled' manner.

<sup>10</sup> However, this only applies to anomalies that are perceived and interpreted as extraordinary experiences. Some theories such as the above-mentioned

*First Sight Theory* (Carpenter 2012) assume permanently ongoing "anomalistic" processes that, however, remain below the threshold of conscious perception and are similar to subliminal perception. The occurrence of an anomaly as content of consciousness, that is as an object of conscious cognition, is therefore the exception. The presentiment experiments by Daryl Bem (2011) also are an example of psi effects that remain below our perceptual threshold.

- <sup>11</sup> On a second level, the comparative analysis of single cases in case collections is an important method of gaining knowledge about anomalistic phenomena, of course (e.g., Alvarado 2002:118–121, Kelly & Tucker 2015:68–69, Rhine 1981:245–257, Rush 1986). Thereby, both quantitative and qualitative methods of analysis can be used.
- <sup>12</sup> Rhea White (1992) provides a more detailed depiction of various approaches to the study of spontaneous psi experiences. She mentions twelve different methods of investigation which, however, cannot be sharply distinguished in every aspect.
- <sup>13</sup> Here we can find an almost positivistic or physicalistic approach in measuring and collecting ostensibly objective data with a great number of high-tech measuring instruments accompanied by rarely questioned spiritual, religious, or spiritualist basic assumptions in a peculiar way.
- <sup>14</sup> Schmidt (2015) provides an overview of theoretical explanation models of psi effects.
- <sup>15</sup> The term "affective field" means, according to Bender, "the total sum of dynamic affective factors operating in a contact situation and the reciprocity of their effects" (Bender 1964:23, see also Roll 2000). With regard to poltergeist cases, see Mischo (1983). William Roll (2004:158–168) suggested a "field theory" of psi which, however, has a slightly different focus, and is more oriented to physical field theories, distinct from the psychological and social–psychological theory of Bender.
- <sup>16</sup> With regard to the latter, this seemingly paradoxical statement is based on the experience that in genuine poltergeist cases the RSPK phenomena cease to appear after the arrival of investigators because of the elusive nature of such phenomena, or maybe their 'trickster' quality. With the Model of Pragmatic Information, Walter von Lucadou (1995a) provides a plausible explanation for the specific dynamics of RSPK phenomena (with regard to dynamics of poltergeist cases, cf. Lucadou & Zahradnik 2004).
- <sup>17</sup> In a talk about near-death experiences, for instance, a speaker stated with regard to the authenticity of such accounts: "If tens of thousands report letter by letter the same story, and then there comes somebody and reports a different story of what he had experienced," then it is immediately clear

that it must be invented (Christoph Konrad Kalka, September, 13, 2003, DEGUFO-Jubiläumskongress, Bad Kreuznach).

- <sup>18</sup> It is inevitable because of the empirical underdetermination of theory in the sense of Quine (1951).
- <sup>19</sup> However, one cannot completely dismiss the possibility of physical correlates of these phenomena.
- <sup>20</sup> Anthropologist Åke Hultkrantz (1981:74–75) impressively describes the systematic withholding of the findings of methodically sound field research for fear of loss of reputation and the related swift end to a research career. The potential size of the commotion, and strength of the reaction resulting from successful publication on an anomalistic issue in a prestigious mainstream journal—and this may well prove to be possible because of the excellent reputation that the scientist has earned in the scientific community due to his groundbreaking research on conventional research topics—has been demonstrated by the article "Feeling the future: Experimental evidence for anomalous retroactive influences on cognition and affect" in the *Journal of Personality and Social Psychology* (Bem 2011). This immediately gave rise to a heated debate, and created doubt about experimental and statistical methods that had until then been unquestioned (cf. Radin 2013:168–169).
- <sup>21</sup> See also Mayer (2013b) and Mayer and Gründer (2011).
- <sup>22</sup> The social sciences have been concerned with the issue of the epistemological value of such subsequential experiential reports for a long time (cf. e.g., Nassehi 1994).
- <sup>23</sup> The term "objective" is used here in an instrumental–methodological sense, and not in a strict ontological sense.
- <sup>24</sup> Cassaniti & Luhrmann (2011, 2014) and Luhrmann (2012) also provide impressive examples of such processes with their investigations of ExEs of members of American evangelical churches and of Thai Buddhists in a village in Northern Thailand.

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