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# **COUNTERING TERRORIST FINANCING**

**THE PRACTITIONER'S POINT OF VIEW**

Offprint



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HENRIETTE HAAS\*

## Systematic Observation as a tool in combating terrorism

### I. Profiling and case analysis in counter-terrorism

Preventing and responding to the financing of terrorism often seems like the proverbial search for a needle in a haystack: how to distinguish terrorists from other banking customers and prevent terrorist money from being used to fund an attack? Time and again people put their hopes in psychological profiles of terrorists and the possibility of thus identifying leads and suspects. Yet, psychological research on known terrorists has established no distinct personality profile for the future terrorist (AIVD 2002). While some terrorists were criminals before they found a political excuse for their behaviour, others were misguided young people, searching for individual identity and meaning. Their vulnerability to manipulation and exploitation was related to their personal histories and cannot be generalised. At the wrong moment, they fell prey to indoctrination by a militant group (AIVD 2002, Manningham-Buller 2006). The same holds true for sympathisers and extremists who support terrorist activities ideologically, financially or logistically. Other terrorist cells, usually very small ones, are started by self-motivated violent extremists, who find information on *modus operandi* on the Internet. For those radicalised individuals, propaganda on thousands and thousands of extremist webpages creates a sense of belonging to a 'global Jihad movement', independent of personal background and social environment (Deutsches Bundesministerium des Inneren 2008: 204).

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Hence, ‘offender profiling’, as portrayed in film and television, is unhelpful in counter-terrorism. It is equally unhelpful in other areas of criminal justice. The idea that delinquents have a distinct personality, which accords with their specific type of crime, cannot withstand comparison with the scientific data (Haas & Killias 2003). There is still room for psychologists in criminal investigations. However, instead of speculating on the criminal mind, criminal psychologists conduct an extremely meticulous analysis of the available material in a case, taking even the smallest ‘signs’ of evidence into account. Together with the rest of the investigative team (detectives, supervisors, forensic scientists and pathologists), they then brainstorm, generating a range of hypotheses that can be checked for consistency with the evidence. Thus, so-called ‘profiling’ is not about personalities, it is about gathering the maximum amount of intelligence from the available data.

To improve our capacity for scientific observation, the author has been developing the method known as ‘Systematic Observation’ since 2003. The procedure takes universally accepted scientific principles from epistemology and cognitive science and develops them into a set of guidelines, which logically structure the process of observation. This system has proven successful in the investigation of terrorist acts and there is potential for its integration into compliance systems used to identify terrorist finance before it enters the financial system.

## II. Deduction of the five rules from principles of epistemology and cognitive science

Which influences guide human perception? One of the earliest theories about perception in psychology is *Gestalt* theory, also called *Theory of Forms* (not to be confused with *Gestalt* therapy). Its premise is that a form to be recognised is always composed by a shape that is suspended on a ground (Koffka 1935: 184). Using this approach, we can consider a criminal case as a form. The shape of a criminal case

consists of all human behaviours that led to it and to its concealment. The ground consists of all other incidents and behaviours, which happened coincidentally at the same time and place. Identifying the shape and the ground in a given criminal form is a complex process of interpretation, in which the due diligence procedure or the police investigation is only the first stage.

The process which leads to the correct recognition of a form can be disturbed in various ways. In a series of experiments, *Gestalt* psychologists have found that perception follows various intuitive paths, which tend to lead to false assumptions. Cognitive psychologists and economists have established the negative influence that those common perceptual biases generally have on decision-making (e.g., Tversky & Kahneman, 1981). The first influence is the influence of proximity, meaning that physically or temporally close objects are often interpreted as causally belonging together. The second influence concerns a resemblance between, or similarity of, objects: similar objects (or events) tend to be identified as belonging to the same class of objects or as being attributable to the same cause. The third influence reveals a human tendency to complete partial shapes by imputing substitutes prematurely. The fourth influence, sometimes called 'the law of the good form', says that we prefer the obvious, the simple and the symmetric shape over coincidental, complex or messy forms. So, there is an overall human tendency to jump to conclusions, to simplify and to make superficial interpretations. This may have been useful at the beginning of evolution but it is less helpful in this complex world of crime and finance. Human nature being what it is, we need a new, more scientific approach to train and handle perception.

### III. The five rules of Systematic Observation

Essentially, the method of Systematic Observation consists of a logically ordered set of principles that guide perception in a systematic way. They are:

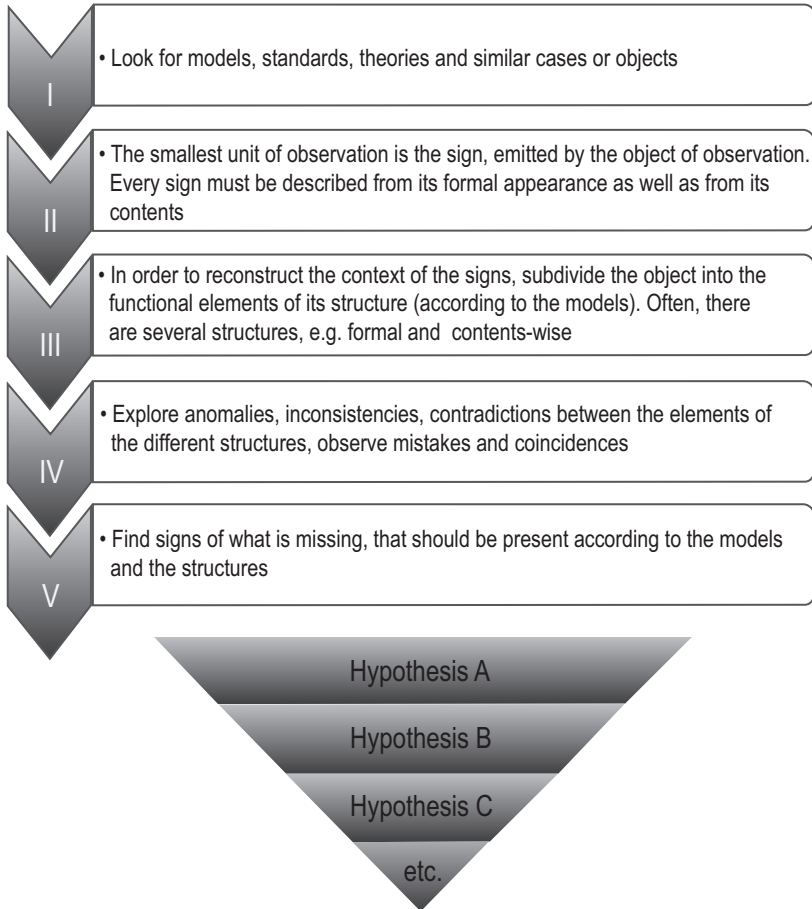


Figure 1 – The sequence of the five meta-cognitive rules leading to the creation of hypotheses

The sequence of the rules ensures that the activity of observing is pursued systematically and not selectively. The first rule opens the observers' mind (his/her perception and reasoning) and provides hints as to what he/she must look out for. The second rule tells the observer how to treat the smallest units of perception, called 'signs'. The third rule ensures that the observer has a complete picture of all formal and material aspects of the object of observation. The fourth rule helps the observer distinguish between relevant signs and accidental signs and between natural and artificial signs; this enables him/her to establish a deterministic sequence of signs. The last rule completes the process, in so far as missing elements, if they exist, are also taken into account.

In following this five-step process, the observer will come up with hypotheses, which can then be discussed in the light of the picture which emerges from the available evidence. This is a separate task for which there is another systematic procedure instead of the everyday heuristic approach.

### *I. Rule I: comparison with models, standards and similar cases*

Modern notions of perception take into account the contribution of the perceiving subject. In cognitive psychology, perception is understood as a cyclic activity (Neisser 1976: 20). We perceiving subjects, we explore our environment. From this environment, we receive stimuli, which we compare to our previous knowledge (mental schemata or models). The schemata contain the collected knowledge derived from past experience and assist us in recognising what we are perceiving; they also (re)direct our exploration to the relevant environmental stimuli. The comparison between mental models and stimuli from the environment can also lead to a modification of the existing knowledge as some clues from the environment may not match our schemata. In that case, the memorised information must be adapted and the arsenal of schemata must be enlarged.

Usually, people begin by exploring the environment and 'stay there for a while'. But – and this is the first rule – we can also enter the perceptual cycle by consulting models for a given object, case or situation immediately, in order to increase our personal supply of



schemata (standards, theories, etc.) right from the start. When it comes to a crime scene, we can order the back-office to start collecting theoretical information and files from similar cases quickly. The comparison with different models can attract our attention to details that we neglected before. But it can do even more, by helping us realise certain differences between our object of observation and the consulted models. Thus, we may be led to new, unknown or atypical aspects of the case.

Our own professional experience provides another useful set of mental schemata, though it does have the disadvantage of being subjective and influenced by random factors. The search for models, standards and similar cases will enlarge our individual horizon by introducing us to more objective knowledge and different perspectives. It is critical to start the process of opening our consciousness as soon as possible in any observation, as our goal is to avoid the permanent loss of relevant information.

*II. Rule II: separate formal aspects from the contents and observe them both*

Having found the relevant models, we return to exploration. Semiotics tells us that the smallest unit of perception is a 'sign'. All science begins with a description of signs that were left from signals emitted from material as well as from immaterial phenomena. The Swiss linguist de Saussure (1916, 1995: 99) defined the sign as an entity with two 'faces': it has an (outer) appearance and an (inner) meaning. The double nature of the sign (appearance and signification) allows us to state the second rule of Systematic Observation: consider separately those aspects that refer to the formal structure of the object and those that refer to its contents (or signification) and always look at models for both aspects. The appearance of a sign can have no relation at all to its signification. For instance, the appearance of the linguistic sign composed by the four letters f-r-o-g has nothing to do with any animal but by pure convention the word 'frog' bears a meaning, which refers to the animal.

The rule that the sign is the basic unit of perception also determines the admissibility of a given interpretation with respect to its meaning. Umberto Eco (1973: chap. 5, 5.19) has said that we must interpret a sign as a coded communication within a given social, cultural and individual context. As a result, the sign receives its signification only by, and within, its context. This is easily illustrated by the sentence ‘my dog ran out of the house when it was raining cats and dogs.’ ‘To rain cats and dogs’ is an English colloquialism meaning ‘to rain heavily’. In this sentence, the meaning of the word ‘dog’ – as a sign – is not unique and depends entirely on the context of the words around it: my pet dog did not run out of the house to play with some stray dogs that had fallen from the sky in a rain shower. Rather, it ran outside during heavy rain. Thus, a neutral description of the form of a sign is much easier to accomplish than a neutral description of its content. So, when in doubt, we need to indicate multiple interpretations of a sign’s potential meaning.

In forensic science, signs of evidence have highly individual meanings, in contrast to linguistic signs that have a more or less common signification. What then is the relationship between the appearance and signification of a sign of evidence? Some signs of evidence can be parts or bits of a whole. For example, traces of blood are simply part of the blood of an injured person or animal. Other signs of evidence, such as the date of a specific transaction, are purely abstract. There are other facts again that consist of intentionally deceptive signs, whose form indicates exactly the opposite of their appearance (think, for instance, of a gift which is really a bribe).

Semiotics, the scientific study of signs, differentiates between natural and artificial signs (Eco 1977: chapter 2.8, paragraph 2.8.7). Natural signs are signs that occur even when there is no intention to send a message (e.g., psychiatric symptoms, mistakes, chemical processes in a dead body, signature aspects in violent crime), while artificial signs are wilful communications (e.g., threat letters, the staging of crime scenes to manipulate the police or the bait presented to potential victims in a confidence operation).

*III. Rule III: dissect the structure of an entity into its functional elements (using models)*

As the meaning of a sign is only apparent when it is viewed in its context, the third rule requires us to reconstruct the entire context of the signs. This is an important and difficult step since, having collected ample material, we may no longer know where to begin: we may have lost the overview of the case. To develop principles of Systematic Observation, we need to know more about structuralism and linguistics, the science of the structure of language.

Linguists were the first to deal with the challenge of dissecting symbolic objects of human communication into their functional elements. According to Grawitz (2001: 318):

[...] Structuralism has a very peculiar conception of the linguistic system: it is essentially considered as a system of signs. [...] The system appears like a net of differences between signs [...] Linguistic research appears from then on mostly as a definition of minimal units, separated by an operation of commutation: whatever changes the meaning when it is substituted by another element can be considered a minimal unit.

Grawitz (2001: 431) later described the position of the French anthropologist Lévi-Strauss (1958), who applied this method to social science and to human behaviour:

[...], the structure implies limited characteristics. Combinations and transformations of them permit to pass from one system to another and to understand their relationships. The idea of a structure involves an element of transformation and of prevision.

Minsky (1985: chap. 12, paras. 12.4 - 12.5) in *Society of Mind* then added a new recurrent aspect to the definition of structures. He underlined the fact that within any structure there is an inherent function and the components represent its sub-functions. Structures, in this sense, can be perpetually refined into smaller sub-structures and imbedded in larger super-structures.

Establishing underlying structures is, in fact, the most challenging task of Systematic Observation. While the second rule deals with the smallest unit of perception, the third rule deals with the smallest units

of the material or immaterial objects we are observing. Using the models to structure the object of observation into its functional elements, helps ensure that we are comprehensive and that we can break down an object which is too large to be grasped at once. We treat each object as a mathematical set of  $j$  elements and  $n$  corresponding functions:  $M=\{e1, e2, e3, \dots, ej, f1, f2, f3, \dots, fn\}$ . Having defined these sets for every model ( $M1, M2$ , etc.), we can describe all elements and functions, one after the other. To give an example: the elements of a social interaction could be classified by the so-called W-questions: 'Who has done what to whom, what instruments or methods have been used, where and when did it happen, why and under which circumstances did it happen?' or as  $M=\{\text{who, done what, to whom, with what, where, when, why, which circumstances}\}$ .

The procedure can be tedious since several models generally fit one object and the procedure has to be completed with all those structures.

#### *IV. Rule IV: exploring inconsistencies, errors, contradictions and strange coincidences*

By observing every one of the structural elements, we build a fairly comprehensive picture of the object. However, these facts do not always produce a coherent picture. It is important to observe and to register objectively all signs of evidence even if they do not fit the scheme, neither levelling out inconsistencies, nor exaggerating them. Sometimes, we may hit upon facts that make no sense at all. Should we leave these facts aside to avoid giving an impression of incompetence? Most certainly not! It is a sign of professionalism to admit that something is not (yet) understood. The very essence of scientific thinking and professional integrity is to register everything, including the incomprehensible and the contradictory.

Let us remember unknown phenomena occur embedded within of chance events (Kind 1987: 43). At the beginning of the process, we cannot know the difference between accidental elements and the determined structure of an individual's or a group's actions. Only certain inconsistencies may point to what is relevant and what is not. In Systematic Observation, we search for anomalies in the signs within a pre-

viously established structure (e.g., contradictions between the contents of different statements) and between different structures (e.g., contradictions between the contents of a text and its grammatical characteristics).

Investigators pay a lot of attention to inconsistencies, because they suspect them of being artificial signs, i.e., communications from a subject who wants to blur the facts or deceive others. Nevertheless, such behaviour is not always linked to the subject matter of the investigation. People lie for many different reasons and they may hide things that have nothing to do whatsoever with the present case.

So, contrary to the logic used in detective novels, the fourth rule is not the only principle of Systematic Observation and neither is it the first step in the process of analysing criminal cases or problems in general. Exploring inconsistencies, contradictions and bizarre coincidences comes only after the analysis of the objects in terms of models and functional elements, for only then can they be interpreted on the basis of the entire case, by comparing different elements with each other. A spelling mistake has one meaning, if the text is written by a well-educated person and another, if the text is written by a semi-literate person and contains dozens of other spelling mistakes.

Contradictions that appear at the beginning of a case, in witness statements or a suspect's deposition, are obviously useful for investigators. However, subtle inconsistencies may emerge later, disturbing a seemingly neat and obvious case or (in the finance industry) a valuable project that is well under way. Such inconsistencies are likely to pass unnoticed or to be shoved aside by investigators or compliance officers. They are annoying. Giddens (1984: 167) describes this phenomenon in more abstract terms:

The work of Kuhn and other authors show that researchers ignore or want to make disappear with far-fetched explanations all those results of their experiments or observations which are incompatible with their theories or which would even prove them false.

Therefore, obeying the fourth rule also means submitting to tedious supplementary examinations, instead of defending older hypotheses against new insights. Thomas Henry Huxley (1870/2001: 229) described the attendant emotional challenge: 'The great tragedy of Science is the slaying of a beautiful hypothesis by an ugly fact'.

*V. Rule V: discovering negative signs  
(concerning missing elements)*

The fifth and last rule refers to tracing signs of missing elements that should be present. The basic sets of functional elements  $M1 = \{e1, e2, e3, \dots, ej, f1, f2, f3, \dots, fn\}$ ,  $M2 = [\dots]$ ,  $M3 = [\dots]$  provide clues on what is missing. This activity terminates the Systematic Observation and guarantees that the entire situation has been taken into account. Nordby (2000: 63) commented on the difference between a sign of evidence and proof: ‘Absence of proof is not proof of absence but the absence of a sign can itself be a sign’.

*VI. Checking a hypothesis for plausibility*

In working on a criminal case, we are reconstructing a unique historical event between several actors by taking into account and interpreting different signs. Nordby (2000: 206) explained why observers can come to very different conclusions on the same case:

Part of seeing a sign involves recognising its significance and building it into an inference. Dismissing signs and what follows deductively from them as irrelevant along one path and including them as relevant along another, may result in contradictory conclusions drawn from the same observations.

So, we can say that the processes of observation and interpretation are composed by two inverse ways of reasoning: inclusion and exclusion. On the one hand, we need to include all relevant aspects of the case and, on the other hand, we need to exclude everything that is not important. Then again, at the beginning we do not know which is which – even if we think we do. Given that signs of evidence do not necessarily speak for themselves, we are obliged to complete our knowledge about a case (i.e., the shape and the ground) in the most exhaustive way possible. This task was accomplished by the applying the five rules of observation.

In a second step, we brainstorm and list all the ideas and hypotheses that have come to mind in the process of collecting signs of evidence. Then, in the third step, we can start to interpret the picture of

the signs that has emerged from the evidence. At this point, we want to be very critical and we want to create total transparency about the situation for our current work and for later stages of the investigation. We can leave nothing to chance. We need to undertake this process in a rational way and account for all the information we have gathered in the previous phases.

To achieve this level of thoroughness, it can help to prepare a three-way table of all signs supporting a particular hypothesis, all signs militating against that hypothesis and all inconclusive signs. This helps us sort the signs and make a preliminary evaluation of each hypothesis with respect to its plausibility.

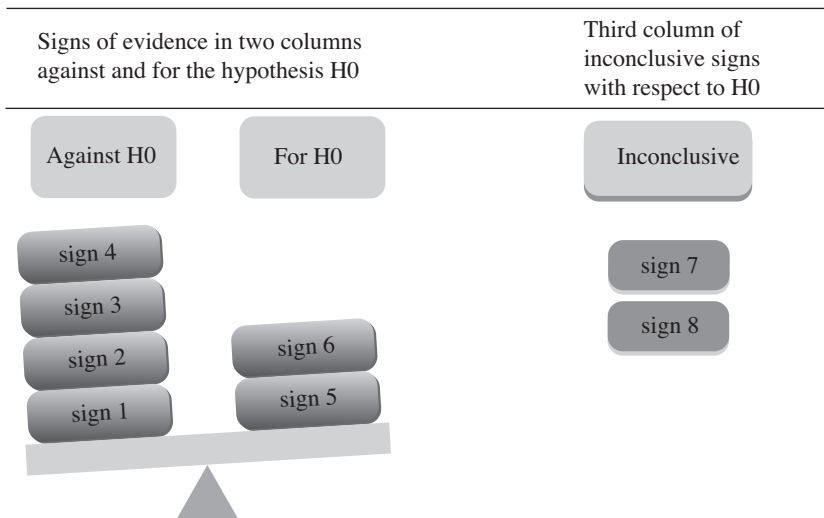


Figure 2 – Weighing the signs for and against a hypothesis H0 and accounting for the rest

The third column, which contains all inconclusive signs with respect to a given hypothesis H0, is also very important since some of those signs may assume a new meaning and be useful at a later stage of an investigation. Condensing the information in this way helps the observer to decide which leads should be pursued and which ones should be abandoned.

#### IV. Systematic Observation in the criminal investigation – the case of the ‘anthrax letter’

##### *I. The facts of the case*

To demonstrate the application of the method in a more complex case, let us take one of the anthrax letters of 2001. Two weeks after the attacks on the World Trade Centre and the Pentagon of 11 September 2001 (9/11), an editor’s assistant at the New York Post discovered a strange blister on her finger. Her doctor diagnosed skin anthrax, a disease almost impossible to contract living and working in a big city. In the course of the following weeks, there was an unusual incidence of this disease throughout the USA. In total, five people were killed and another 17 fell ill from a strain of anthrax later connected to the ‘anthrax letters’ (Federal Bureau of Investigation (FBI) 2008). Even though there is a heavy metal band by the name of ‘Anthrax’, the general public knew very little about this bacterium, let alone that it could be used as a biological weapon.

A month later, in October 2001, the FBI discovered a wet envelope in the offices of the New York Post. Inside was a letter and something looking like wet dog food. The substance was later identified as a new strand of technically refined anthrax spores. This material only exists inside high-security laboratories; it cannot be bought on any black market and it cannot be fabricated by an amateur. The letter paper and the pre-stamped envelope were produced in batches of millions per year and sold in the United States (US). The stamp (unreadable in the photo) showed that the letter was sent on 18 September 2001 from Trenton, New Jersey. Unfortunately, no one had seen the person who deposited the envelope.

Let us assume, for the sake of the exercise, that no traces of human DNA, fibres or fingerprints could be found on the envelope or on the letter, except those from postal employees. Let us also assume that experts on handwriting declared that they could not determine whether the letter was written by someone intentionally altering his/her handwriting or by someone with little practice in the Latin alphabet. Under these



circumstances, how would you proceed if it were up to you to decide which leads were to be taken in this investigation? According to *Gestalt* psychology, one might first suspect another attack by al-Qaida, given that the attacks on the World Trade Centre and the Pentagon had occurred only a few days earlier. Both crimes occurred within a short time of each other and are similar in many ways: they targeted innocent civilians, they were technically sophisticated and ‘innovative’ in terms of their *modus operandi*, they were committed against public services and they were both likely to create mass panic. Whoever committed these crimes wanted the broadest media attention possible. Knowing that the propensities of spontaneous perception are often misleading, in the following we will proceed systematically.

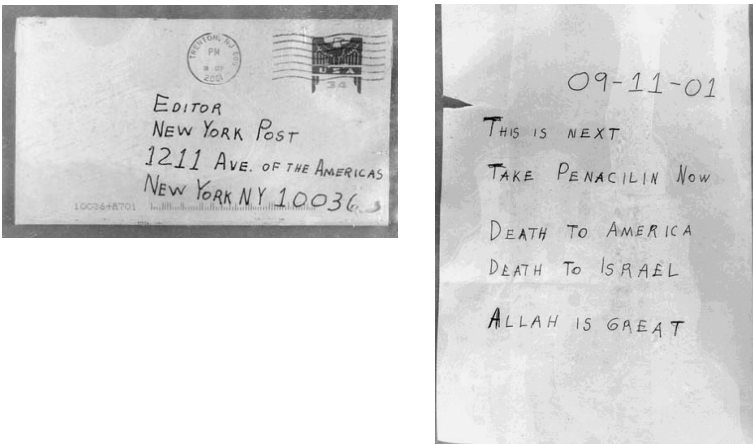


Figure 3 – The letter to the New York Post containing technically refined spores of anthrax<sup>3</sup>

3 As retrieved on 26 October 2008 from [www.fbi.gov/page2/august08/anthrax\\_gallery7.html](http://www.fbi.gov/page2/august08/anthrax_gallery7.html).

## II. Applying the Rules I–V

### Applying Rule I: conducting a comparison with models

In investigating crimes, there is often little evidence from which to draw inferences. Let us look first at the envelope containing the anthrax letter: can anything be derived from that? The answer is yes, by using a comparison of models. For this purpose, we take the address of the New York Post as it appears in the phonebook and on the company website and place it side-by-side with the envelope:

*Corpus delicti* (envelope)

Standard



*New York Post*  
 1211 Avenue of the Americas  
 New York, NY 10036-8790

Figure 4 – Comparing the *corpus delicti*, as it appears on the FBI website<sup>4</sup>, with the NY Post’s standard address, as listed on its website.<sup>5</sup>

Comparing the address on the *corpus delicti* with the model addresses, we indeed find a difference between the postal (zip) codes: the code on the envelope contains six digits whereas the code on the standard address contains ten. This detail might easily have escaped our attention had we not consulted the model address. The extra four digits (known as the ‘ZIP+4’ code) are mainly intended for business mailers and are not mandatory in the US. This would not be at all obvious to a foreigner operating from abroad. Thus, this piece of information, gained by comparison with a model, leads us to a hypothesis concerning the perpetrator’s familiarity with US Postal Services. In conclud-

4 Available at [www.fbi.gov/page2/august08/anthrax\\_gallery7.html](http://www.fbi.gov/page2/august08/anthrax_gallery7.html).

5 Available at [www.nypost.com](http://www.nypost.com).

ing our examination, we also notice that the handwriting has a downward slant; we register this sign, even if there is no explanation at hand.

Then, we look at the threat letter itself. Here, we want to consider several models. On the one hand, we have different norms for letter-writing and different models for letters in different social contexts and cultures. In this case, we would look at the standard elements for business letters in the US and the way in which religious Muslims quote the Qu’ran in their letters. For example, in business correspondence, Americans generally use the following format:

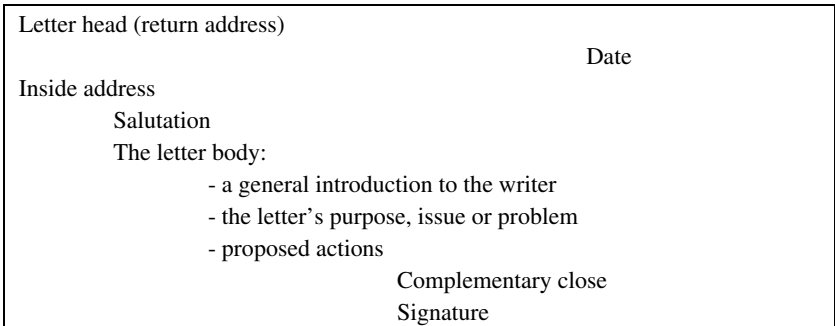


Figure 5 – Model of a standard business letter (Zahorsky 2008)

Letters by religious Muslims customarily include some standard features, which are missing in this case. For example, one would expect such a letter to begin with the ‘Basmala’, the religious commitment that introduces the chapters of Qu’ran, as well as other texts with a religious connotation (see Renfer in Renfer & Haas 2008: 322).

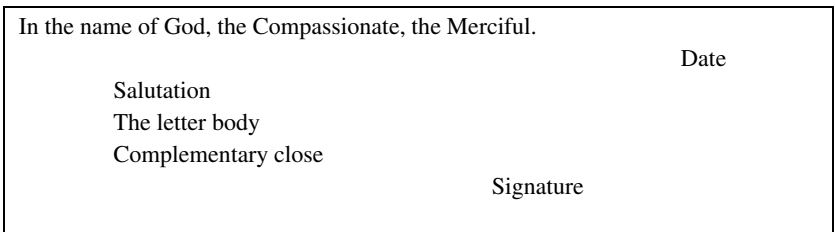


Figure 6 – Model for religious Islamic letters

We also wonder why the exclamation ‘Allah is great’ was written in English and not in Arabic. The phrase is an incorrect but very common translation of the so-called *Takbeer* ‘Allahu akbar’ (comparable to the Halleluiah in the Judeo-Christian Bible). According to Marc Renfer, it is recited in its original language by religious Muslims in numerous contexts, e.g., in prayer, in praise or in times of distress or in war.<sup>6</sup> The *Takbeer* actually means ‘God is greater’ (than man).

الله اكبر

Figure 7 – The *Takbeer* ‘Allahu akbar’

Dr. Thomas Hansjakob<sup>7</sup> rightly cautioned, in a personal communication to the author, that criminal behaviour, deviant per definition, cannot be analysed in the light of norms only. The choice of models must account for our perception of the norm and of the deviance as well. We work like doctors, who compare their patients’ symptoms with the statistics of average healthy individuals and also of typical pathologies. Thus, we usually take case samples and statistics from the same type of crime and compare them to the facts of our case. This is adequate for ‘standard’ crimes. However, where a crime is highly innovative, we have to content ourselves with models from similar crimes. Thus, for the sake of the exercise, our model in examining the anthrax letter was a manifesto referring to bombings.

The following threat letter was sent after the Atlanta Bombings at Centennial Olympic Park on 27 July 1996, Sandy Springs Professional Building on 16 January 1997 and the Otherside Lounge on 21 February 1997:

- 6 Marc Renfer, MA, personal communication 2008, first author of another joint paper on the application of Systematic Observation in counter-terrorism is specialist in Arabic, Persian and Turkish linguistics.
- 7 Thomas Hansjakob is Chief Prosecutor in the Canton of St Gallen and Editor of the well known German textbook on reasoning in criminal cases (Walder-Hansjakob 2006).

THE BOMBING'S IN SANDY SPRING'S AND MIDTOWN WERE CARRIED-OUT BY UNITS OF THE ARMY OF GOD.

THE ABORTION WAS THE TARGET OF THE FIRST DEVICE. THE MURDER OF 3.5 MILLION CHILDREN EVERY YEAR WILL NOT BE "TOLERATED". THOSE WHO PARTICIPATE IN ANYWAY IN THE MURDER OF CHILDREN MAY BE TARGETED FOR ATTACK. THE ATTACK THEREFORE SERVES AS A WARNING: ANYONE IN OR AROUND FACILITIES THAT MURDER CHILDREN MAY BECOME VICTIMS OF RETRIBUTION. THE NEXT FACILITY TARGETED MAY NOT BE EMPTY.

THE SECOND DEVICE WAS AIMED AT AGENT OF THE SO-CALLED FEDERAL GOVERNMENT I.E. A.T.F. F.B.I. MARSHALL'S E.T.C. WE DECLARE AND WILL WAGE TOTAL WAR ON THE UNGODLY COMMUNIST REGIME IN NEW YORK AND YOUR LEGALSTIVE – BUREAUCRATIC LACKEY'S IN WASHINGTON. IT IS YOU WHO ARE RESPONSIBLE AND PRESIDE OVER THE MURDER OF CHILDREN AND ISSUE THE POLICY OF UNGODLY PERVERSION THAT'S DESTROYING OUR ~~ARE~~ PEOPLE. WE WILL TARGET ALL FACILTITIES AND PERSONNELL OF THE FEDERAL GOVERNMENT.

THE ATTACK IN MIDTOWN WAS AIMED AT THE SODOMITE BAR (THE OTHERSIDE). WE WILL TARGET SODOMITES, THERE ORGANIZATIONS, AND ALL THOSE WHO PUSH THERE AGENDA.

“ DEATH TO THE NEW WORLD ORDER”

Figure 8 – A manifesto sent after the Atlanta bombings (ATF 1997).

The 'Army of God' letters were sent to a local newspaper and to Reuters press agency in Atlanta. All three bombings were later found to be the work of anti-abortion extremist, Eric Robert Rudolph. Arrested in 2003, Rudolph was charged with bombing attacks that killed two people and injured and maimed more than 150 others. He pleaded guilty and was sentenced to life in prison in 2005 (ATF Pressroom: 2003, 2005). Although it seems that he did have supporters (especially his brother), Rudolph essentially acted alone and the 'Army of God' was a fiction.

Looking briefly at his criminal manifesto, we see that it is full of spelling mistakes and some formal requirements are missing. Nonetheless, it meets the requirements of a business letter as the writer presents himself in the main body of text, names the issue and threatens action.

*Applying Rule II: considering the formal aspects and the contents of each sign and describing them*

Having observed the formal features of the documents, such as the address, we now turn to their contents. What, then, are the contents of an address? As this next step is about victimology,<sup>8</sup> we ask, ‘Is the letter addressed to an organisation or a person?’ and ‘Why was this particular organisation targeted?’ After all, the New York Post, unlike the World Trade Centre or the Pentagon, is not a national symbol that represents the US in the eyes of the world. Rather it is a local tabloid, which is quite unknown abroad. It does not seem to be the most meaningful target for an international terrorist group. Surely, if the perpetrator(s) of the anthrax attacks was/were linked to al-Qaida, he, she or they would have sent the deadly letters to the New York Times, the Washington Post or CNN. These major news companies could have been chosen just as easily and would have been capable of attracting even more international media attention.

*Applying Rule III: observing complex objects by structural analysis*

If, in observing the envelope, we addressed the lack of material by using a comparison with models, with the letter itself we face the opposite problem: so much material that we have difficulty knowing where to start. Nevertheless, it is again the comparison with models, which helps us to subdivide the object into its structural components and thus to observe it. We have already seen the two models of the American business letter and letters by religious Muslims. Within a letter, several sub-structures are possible. Here we ordered them on a scale ranging from the most formal aspects to the contents properly speaking.

8 In real life, one would have to investigate and interview the victim thoroughly.

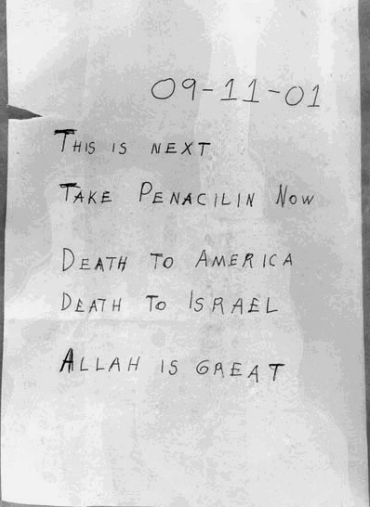
The letter <sup>9</sup>	Different structures
	<ol style="list-style-type: none"> <li>a. Physical evidence: paper, ink, human DNA, fingerprints, fibres, spores, etc.</li> <li>b. Graphics and typography: format, stains, letters of the alphabet, numbers.</li> <li>c. Linguistics: words, sentences, punctuation, paragraphs, language (vernacular, foreign, feigned foreign, etc.), spelling, grammar, style (rhythm, rhyme, etc.).</li> <li>d. Elements of a typical business letter: return address, city, date, inside address, salutation, main body, closing, signature.</li> <li>e. Contents of the drama: actors, how the actors are named, the sequence of themes.</li> </ol>

Figure 9 – Different structures of a letter and their elements

There is not the space here to conduct a complete analysis of the letter, so we will have to make do with some examples. Starting with graphics and typography, we observe that the writer has used a typographic function called ‘small capitals’. Next, we see that the figure ‘1’ resembles European handwriting style. The American way of writing the number one is like the capital letter ‘I’. However, the perpetrator used a typographic feature called ‘serifs’ (little decorative lines, such as in the ‘1’), instead of *sans serif*, which is more common in Europe. Furthermore, the number nine is written in the American style as a ‘9’, whereas Europeans mostly draw a curve at the bottom of the number, e.g., ‘9’. The date, by the way, is again written in the American style (‘09-11-01’) and not in the European style, in which the day is com-

9 Available at [www.fbi.gov/page2/august08/anthrax\\_gallery7.html](http://www.fbi.gov/page2/august08/anthrax_gallery7.html).

monly placed before the month (e.g., ‘11 September 2001’ abbreviated as ‘11.09.01’).

Considering linguistics, we notice that the manifesto is in English not in Arabic, that each line has exactly three words and that the writer of this text used very short sentences without full stops. Most readers will also recognise the misspelling of penicillin as ‘penacilin’. There is a kind of hacked rhythm in this text, which is similar to military commands. The impression that the whole letter was quite carefully composed is also sustained by the well-respected margins in the layout. Altogether, it seems that this letter was not written in a hurry. On the contrary, our perpetrator(s) seem(s) to have paid considerable attention to detail in order to communicate exactly what he, she or they wanted to say and nothing else. The comparison with a business letter can be useful to determine the level of professional functioning of an anonymous author. Some authors write in such a confused style and layout that it is obvious that they could not function in a ‘white collar’ job.

Finally, to examine the contents under the microscope, we put up the list of actors (including the pronouns, if there are any) and a list of themes (naming the list of actors is actually an idea that was developed by Sapir (1999)). Within the list of actors, we often find the anonymous author himself because it is difficult for people to transmit an issue that is important to them without leaving any psychological ‘footprints’. Following this assumption, we might want to look for an Israeli author or, more likely, an American.

List of the actors	List of the themes
a. America b. Israel c. Allah	a. What comes after the crimes of 9/11 b. Protect yourself with penicillin c. America and Israel should feel threatened d. A poor translation of the <i>Takbeer</i>

Figure 10 – Actors and themes of the drama

Incidentally, in letters which announce a future attack, the list of themes sometimes leaves clues about the seriousness of a threat, in that the degree of aggressiveness may increase or decrease within the sequence of themes. After structuring the object in different ways, we



may also realise that a clear distinction between form and contents can only be made in theory but not in practice. Form and contents cannot be classified into absolute categories as they are relative with respect to one another.

*Applying Rule IV: exploring anomalies, inconsistencies, errors, contradictions and coincidences*

Given that the author of the anthrax letter has written his message quite carefully and that refined anthrax spores are accessible only to a small circle of highly trained specialists, there is a bizarre contradiction. How can a person who is apparently familiar with the safety procedures necessary when handling anthrax, not be able to spell the word 'penicillin'? Penicillin not only a much more common *substance* than anthrax but it is also a much more common *word*. Penicillin is, moreover, essential for protecting against infection in case of accidental exposure to the anthrax bacterium. Thus, anybody familiar with the first substance is also familiar with the second. For us, the essential question is whether the misspelling of penicillin is a natural sign (i.e., a symptom, such as dyslexia) or whether is it an artificial sign (i.e., a message conceived to manipulate). Why is the word 'penicillin' spelt with an 'a' instead of an 'i'? It may be possible to confuse these sounds in American pronunciation but in many other languages, such as German, French or Italian, one would never make this mistake.

Another anomaly can be observed with respect to the religious Muslim's model letter: a religious Muslim would refer first to Allah because his/her faith is the single most important issue. By contrast, the author of the anthrax letter mentions Allah only at the end. It is also curious that somebody would want to poison so many people and warn them at the same time. No warnings were issued before 9/11 and thus we could have assumed that the terrorists were aiming for the highest possible death toll. So why does *this* perpetrator want to endanger the life of his victims but not necessarily kill them? Is the goal to scare or is there yet another motive behind this crime?

*Applying Rule V: discovering negative signs*

The real difference between the excellent and the ordinary observer is a capacity to identify what is missing. What can be said about the anthrax letter using the rule on the absence of signs? Comparing our letter with the letter that was sent after the Atlanta bombings in Sandy Springs (ATF 1997), we notice that anthrax perpetrator mentions no group name and remains hazy with respect to the issue. In statement analysis, one would interpret this as a lack of commitment in the confession (Sapir 1999). What is the purpose of sending these letters if no political or personal demands are specified? Why not send the deadly spores alone? We wonder what the real issue is here. Could it be that the perpetrator cannot reveal his/her goal because it could lead to identification?

*III. From observation to interpretation:  
checking hypotheses for plausibility*

After applying the five rules to the facts of the case it is time for us to formulate hypotheses and check them for their plausibility. This is the second stage of the method. Kind tells us what it means to identify the pattern of a crime in an investigation (1987: 43):

[...] the identification of pattern in crime investigation may perhaps be defined simply as the identification of a deterministic sequence in a series of apparently chance events.

The method of systematic exploration of all potentially meaningful details does bring with it a certain danger: how can we know that we have not been misled into too much speculation? How can we avoid losing ourselves in far-fetched hypotheses? What is to be done when a controversy over different conflicting hypotheses arises? We use a plausibility check in the form of the three-way table discussed above.

<i>Signs pointing against the hypothesis H0</i>	<i>Signs in favour of hypothesis H0</i>	<i>Inconclusive signs</i>
	A very sophisticated <i>modus operandi</i> was used in both attacks.	
The anthrax letter purports to be written on 11 September 2001 but was sent one week later.	Both attacks were committed within one week of each other.	
	Both attacks were hideous crimes against many innocent civilians.	The address is written with a downward slant.
		The author's knowledge of how to write the zip code implies that he has been living in the US for some time.
Perhaps: the spelling mistake in 'penacilin'.		The perpetrator could be dystectic
There is no group named, the issue remains rather vague.	A manifesto with allusions to Islamist terrorism.	
The authors of the (real) 9/11 attacks did not write a manifesto.		
The author offers no proof that he/she knows the Arabic language, that he/she has inside knowledge of Al-Qaida or that he/she is a Muslim.		

The victim is not a symbol for the US. It is not primarily a target of international interest.		
The perpetrator seems to simulate a non-American way of writing the figure '1', however, he/she does so incorrectly.		

Figure 11 – Plausibility Check for Hypothesis H0: the perpetrator of the anthrax attacks belongs to Al-Qaida (Obviously in a real investigation all four letters would be analysed, many more of these signs would be investigated and other hypotheses would be checked more thoroughly than it was possible in this exercise.)

The plausibility check (Figure 10) shows that four signs point to a Jihadist terror group (as it would be called today) as potential senders of the anthrax letter. Two of those signs could be interpreted either way. On the other hand, we have five clear signs in favour of an American perpetrator with either personal or political motives focused on internal US politics. This is also sustained by the overall nebulous quality of the manifesto, which is quite typical for staged crime scenes and copycat crimes. The hypothesis of a copycat crime is therefore more plausible than the one of 'proper' terrorist attack.

#### *IV. Applying Systematic Observation to the anthrax letter: results*

The preceding analysis of the anthrax letter was first published when the case was still unresolved (Haas 2003). In August 2008, the FBI closed its investigation into the anthrax attacks, ending one of the most complex and expensive investigations in its history. In documents available to the public on the Internet, it revealed a compelling chain of evidence implicating the renowned microbiologist, Dr. Bruce Ivins, as the sole perpetrator of these crimes. In 2005, the origin of the spores was traced to the US laboratory in Fort Detrick. The only specialist having access and links to the crimes was Dr. Ivins. In the course of the investigation, he had demonstrated both bizarre and deceptive behaviour. His presumed motive for the attacks was to promote and finance his research on a vaccination against anthrax. As we can see, not even this highly intelligent and scientifically trained individual was able to hide his ignorance of Islam and cover his own psychological 'footprint' as an American copycat of the 9/11 attacks.

## V. Empirical testing of the Systematic Observation method

As Systematic Observation takes some time, the consequent application of its rules is only justified in cases of some importance. However, the method can be learned and once it is known and practiced regularly, investigators detect suspicious signs with much more ease. With some routine, they grasp many more signs of evidence right from the beginning and save themselves the unnecessary work of pursuing false assumptions. After initial pilot studies, the author and colleagues conducted an experiment in 2006 using 41 graduate students in psychology as volunteers (Haas, Tönz, Gubser-Ernst, Piszewska, in preparation). We found that participants who applied the method after six hours of training were able to observe more signs and draw more correct inferences from the evidence than untrained observers. In 2007 we conducted another study with 174 criminal investigators in eight different Swiss Cantons. Their mean age was 42 years and on average participants had 17 years of professional experience as investigators. At the end of the training, 67 percent of investigators found the method to be useful or very useful for their work and 80 percent considered the method to be a good or very good instruction and training in critical thinking.

## VI. Systematic Observation in customer due diligence for financial intermediaries

### *I. Systematic Observation as a tool for prevention in counter-terrorist financing*

Systematic Observation can also be employed to prevent terrorist funds from entering the global financial system. Legal standards relating to due diligence in the banking sector require client identification and verification. In Switzerland, para. 3 of the Federal Act on the Pre-

vention of Money Laundering requires financial intermediaries, 'prior to commencing business relationships [to], identify the contracting party on the basis of a conclusive document'. When the potential customer is a natural person, the financial intermediary must establish his/her identity by examining and photocopying an official document, such as a passport or identity card. Employees must record the person's first name, surname, date of birth, nationality and home address. At the same time, the intermediary must identify the beneficial owner of the funds.

This is not a trivial task considering that customers of Swiss banks come from all over the world and there is no internationally accepted legal definition of the main elements of a name. Westenburger (2008) illustrates of how the elements of proper names can be defined in different countries. The Western model of 'first name plus surname' (e.g., 'Hans Müller from Germany') is not standard. Other countries may register elements like the father's (first) name instead of surname, the grandfather's first name, the mother's name or middle names. Alternatively, they may provides other definitions 'proper name', 'given name' or 'supplement to name' in their national laws. According Westenburger (2008) more challenges in the identification of proper names arise from the translation of foreign alphabets into the Latin alphabet and from the adaptation of names to reflect the bearer's sex in some languages. In addition, some names are extremely widespread within a community and may indicate a title or membership of a large family clan rather than a surname. Finally, there are the difficulties of identifying a person who has legally changed his/her named due to marriage, naturalisation or for other reasons. In Spain, for example, a name consists of the first name, the mother's name as a middle name and the last name, e.g., 'Felipe Dias Gonzales'. By contrast, a Russian woman whose father's name is 'Aleksandrovič' may appear in her passport with the surname of 'Asimova' and the given names of 'Svetlana Aleksandrovna'. An Egyptian man's passport could contain a first name (e.g., 'Tarek'), the father's name (e.g., 'Mohammed Abdel Aziz'), and the family name (e.g., 'Ahmed'). A Libyan passport, by contrast, would only give a full name ('Mohammed Musa ben Yusuf') and would not distinguish between first names and surnames.

Thus, the transmission of the name from parents to children is also variable across the world.

## *II. Customer identification with Systematic Observation*

Can Systematic Observation be applied to prevent terrorist financing, as well as to investigate terrorist acts after they occur? Applying the Rule I, we need to compare all relevant official identification models with information about terrorists. It is essential to consult the embassies' models and standards for establishing the authenticity of identification papers. It may also be useful to check databases, such as the Council of Europe's Public Register of Authentic Identity and Travel Documents Online (PRADO). From this data a comparison is made with information available about individuals, groups and nations involved in terrorist activities, the observer consulting the respective lists and databases on terrorism.<sup>10</sup>

Using the second rule, we note that a person's name is a sign in the semiotic sense in that it has a formal (outer) appearance and an inner meaning. As we have seen, names are defined quite differently from one culture and nation to another. As a person can be a naturalised citizen, e.g., he could be a certain 'Mr Felipe Gonzales from Switzerland'. A financial intermediary observing formal signs according to Rule II, would then ask if this client is also in possession of another passport, e.g., a Spanish or Latin American passport, and if the client once used his/her mothers' name as the middle name.

Having discussed the formal appearance of a name, in the third step we ask, 'What is its content?' Here the content is obviously the human being described and identified in the passport. To verify if the passport matches the person, the employee of the financial intermediary must compare the photograph and the description (age, sex, height, eye colour, etc.) in the client's identification papers with the real person standing in front him/her.

10 For Switzerland these are available at [www.gwg.admin.ch/d/aktuell/angebot/index.php](http://www.gwg.admin.ch/d/aktuell/angebot/index.php)).



Rule III tells us that a sign, such as a passport, consists of a set of different elements each of which must be observed individually. These elements are: the cover, the different pages with information about the bearer and about countries that he/she has visited recently, as well as the stamps and the sophisticated printing techniques, holograms, marks and perforations used to make passports forgery-proof (Schneider & Höpfner 2008). Each element of this structure must be looked at and compared with the model identification document. This means, for one thing, checking all pages of the document. Only if all pages are controlled, can the banker know whether clients have recently travelled to 'failed states' or if they happen to figure on a list of terrorist suspects.

On the basis of such an inventory of signs, the next step (Rule IV) is to look for any anomalies and inconsistencies. Note that this 'Sherlock Holmes' rule only makes sense on the basis of the previous steps. If one were to jump directly to this rule, much of the relevant information would be missed and anomalies might not be noticed at all. We remember too at this point that anomalies can arise for different reasons and are not only caused by criminal intent. One source of inconsistencies in the spelling of names is differing translations of names from one alphabet into another, e.g., 'Kader' may also be spelt as 'Kadir' depending on the transliteration.

The fifth and last rule (Rule V) – recording what is missing – rounds up the procedure and is based on our analysis of all models and their inherent structures. In the case of customer identification, the knowledge of foreign names and passport models is crucial to identifying missing information in a suspicious document. Then again, we also need to look out for missing pages, stamps, holograms, perforations, etc. (Schneider & Höpfner 2008).

### *III. Challenges and opportunities in applying Systematic Observation to counter-terrorist financing*

The same procedure can be applied to unusual customer demands or transactions, e.g., a lack of interest in otherwise attractive investment opportunities. However, there are particular practical obstacles to using the method as a preventative tool, such as data processing prac-

tices which blur or destroy potentially suspicious details. When information is entered into a computerised database, paper records containing the original information may not be kept or scanned. This effectively blinds the financial intermediary to important details. To avoid this situation, all employees should be properly instructed in the relevance of seemingly ‘small errors’ and told how they can prevent their loss. In particular, workers need to be instructed to introduce data into their computerised system *exactly in the way the information was presented by the client* and to *refrain from correcting* any mistakes and mishaps that came from the client. Another solution, suggested by Dr. Hans-Peter Bauer at the 2008 Giessbach II counter-terrorist financing seminar, would see clients filling out the computerised forms themselves. In this way, all intentional manipulations and blanks could be automatically recorded.

## VII. Conclusion

Systematic Observation is a meta-cognitive tool to establish an inventory of all signs of evidence from documents, photographs and other case material. The procedure was first developed for criminal investigations (Haas 2003) and consists in the application of five easily memorised formulas which help professionals, analysts and investigators to be more proficient observers. The rules are:

- I. Compare the object of observation to models, standards, theories or similar cases
- II. Separate formal aspects from the contents and analyse them both separately
- III. Structure the object into functional elements and explore each of them
- IV. Explore anomalies, inconsistencies, contradictions, mistakes or coincidences
- V. Discover the absence of signs (with models and after structuring the object)

After going through the process of systematically registering every important detail, we are able to draw first hypotheses. Every hypothesis should then be checked for its plausibility by listing systematically every sign speaking for it in one column, every indeterminate sign in a middle column and every sign against it in a third column. This procedure creates more transparency for the situation and prevents us from paying selective attention to some isolated parts of the evidence. This, in turn, provides good grounds for constructive discussions about the decisions to be taken.

The present chapter has shown how this method can be applied in the area of counter-terrorism. First, we have seen that Systematic Observation can be used to analyse threats (written or electronically recorded) and to distinguish ‘terrorist’ from other general criminal activity. Second, we have considered how Systematic Observation can serve as a preventative tool to help private sector institutions to identify suspicious transactions and improve the effectiveness of their compliance systems.

## Bibliography

- AIVD Dutch General Intelligence and Security Service (2002). *Recruitment for the Jihad in the Netherlands – from Incident to Trend*. Leidschendam, NL. Retrieved October 2008 from: [www.aivd.nl/actueel-publicaties/aivd-publicaties](http://www.aivd.nl/actueel-publicaties/aivd-publicaties).
- Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF): Atlanta Bomb Task Force (1997). *Atlanta Bombing Case Consolidation – Centennial Olympic Park Case, Sandy Springs Professional Building, and The Otherside Lounge*. Retrieved October 2008 from <http://www.atf.gov/explarson/atlanpr1.htm>.
- Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) (2003–2005). *ATF Pressroom news releases*, Retrieved October 2008 from [www.atf.gov/press/index.htm](http://www.atf.gov/press/index.htm).
- Bundesministerium des Inneren Deutschland (2008). *Verfassungsschutzbericht 2007*. Berlin, Germany. [Report by the German Office for Protection of the Constitution (Homeland Security)]. Retrieved October 2008 from [www.verfassungsschutz.de](http://www.verfassungsschutz.de).
- Council of Europe (2008). *PRADO – Public Register of Authentic Identity and Travel Documents*. Available at [www.consilium.europa.eu/prado/EN/homeIndex.html](http://www.consilium.europa.eu/prado/EN/homeIndex.html).
- de Saussure, F. (1995) *Cours de linguistique générale*. [Course in General Linguistics]. Paris, France: Grande Bibliothèque Payot. (Original work published 1916).
- Eco, U. (1973). *Segno*. [The Sign]. Milano, Italy: Istituto Editoriale Internazionale.
- Federal Bureau of Investigation (FBI) (9 November 2001). *Amerithrax: Linguistic/Behavioral Analysis*. Retrieved October 2008 from [www.fbi.gov/page2/august08/amerithrax080608a.html](http://www.fbi.gov/page2/august08/amerithrax080608a.html).
- Federal Bureau of Investigation (FBI) (6 August 2008). *Headline Archives ANTHRAX INVESTIGATION – Closing a Chapter*. Retrieved October 2008 from [www.fbi.gov/page2/august08/amerithrax080608a.html](http://www.fbi.gov/page2/august08/amerithrax080608a.html).
- Giddens, A (1984). *Interpretative Soziologie*. [Interpretative Sociology]. Campus Verlag Frankfurt.

- Grawitz, M. (2001). *Méthodes des sciences sociales*. [Methods in Social Science]. Paris, France: Editions Dalloz.
- Haas, H., P. Tönz, J. Gubser-Ernst & M. Pisarzewska (work in progress). *The Basics of Observation – A Method to Improve Perception in Case-Work*.
- Haas, H. (2005). 'Vom Nichtwissen zum Wissen'. [From Ignorance to Knowledge]. *Ungewußt – Zeitschrift für angewandtes Nichtwissen*, 12: 64-85. Available at [www.uni-siegen.de/~ifan/ungewu/heft12/index.htm](http://www.uni-siegen.de/~ifan/ungewu/heft12/index.htm).
- Haas, H. (2003). 'Kriminalistischer Erkenntnisgewinn durch systematisches Beobachten'. [The Gaining of Knowledge by Systematic Observation in the Criminal Investigation]. *Kriminalistik* 57: 93-100.
- Haas, H. (2003). Observer et rédiger des documents en psychologie légale. *Actualités psychologiques*. Institut de psychologie, University of Lausanne.
- Haas, H. & M. Killias (2003). 'The Versatility vs. Specialization Debate: Different Theories of Crime in the Light of a Swiss Birth Cohort.' In: C Britt & M Gottfredson (2003). *Control Theories of Crime and Delinquency (Advances in Criminological Theory, Vol 12*, New Brunswick: Transaction Publishers.
- Huxley, T. (2001). Biogenesis and Abiogenesis. Collected Essays. Vol. 8, *Discourses Biological & Geological*. Chestnut Hill, MA: Adamant Media Corporation. (Original work published in 1870).
- Kind, St. (1987). *The Scientific Investigation of Crime*. Manchester, UK: Forensic Science Services.
- Koffka, K. (1935). *Principles of Gestalt Psychology*. New York, NY: Harcourt Brace.
- Kuhn, T. (1996). *The Structure of Scientific Revolutions*. 3<sup>rd</sup> Ed, Chicago, IL: University of Chicago Press. (Original work published 1962).
- Lévi-Strauss, C. (1958). *Anthropologie structurale*. [Structural Anthropology]. Paris, France: Editions Plon.
- Manningham-Buller, E. (10. Nov. 2006). *Terrorist threat to UK – MI5 chief's full speech*. The Times. Available at [www.timesonline.co.uk/](http://www.timesonline.co.uk/).

- Minsky, M. (1985). *The Society of Mind*, New York, NY: Simon & Schuster.
- Neisser, U. (1976). *Cognition and Reality*, San Francisco, CA: Freeman.
- Nordby, J. (2000). *Dead Reckoning: The Art of Forensic Detection*, Washington DC: CRC Press.
- Renfer M. & H. Haas (2008). 'Systematic Analysis in Counterterrorism: Messages on an Islamist Internet-Forum'. *International Journal of Intelligence and Counter Intelligence*. 21:2: 314–336.
- Sapir, A. (1999). *Workbook: The LSI Course on Scientific Content Analysis SCAN & Workbook: The LSI Advanced Workshop on Scientific Content Analysis SCAN*. Phoenix, Arizona. Available at [www.lsiscan.com](http://www.lsiscan.com).
- Schneider, K. & J. Höpfner (2008). *Anzeichen für gefälschte Legitimationspapiere*. [Red Flags with Respect to Counterfeited Identification Documents]. Presentation 6. Jahreskongress zur Geldwäschebekämpfung Ostdeutsche Sparkassenakademie, *Bankerscampus 2008*. Lecturer at the Akademie für Personenstandswesen in Bad Salzschlirf. Available at [www.bildungscampus.de/content/de/bankerscampus/veranstaltungen/index.php?content=kurs&kurs=s1821470301\\_bc](http://www.bildungscampus.de/content/de/bankerscampus/veranstaltungen/index.php?content=kurs&kurs=s1821470301_bc).
- Tversky, A. & D. Kahneman, (1981). *The framing of decisions and the psychology of choice*. *Science*, Vol 211 (4481): 453–458.
- Walder, H, continued by Hansjakob, Th (2006). *Kriminalistisches Denken*. [Reasoning in Criminalistics]. Kriminalistik Verlag 7<sup>th</sup> Ed, Heidelberg.
- Westenburger, H. (2008). *Namensrecht ausländischer Staaten*. [Legal Definitions of Names in Foreign States]. Presentation 6. Jahreskongress zur Geldwäschebekämpfung Ostdeutsche Sparkassenakademie, *Bankerscampus 2008*. Lecturer at the Akademie für Personenstandswesen in Bad Salzschlirf. Available at [www.bildungscampus.de/content/de/bankerscampus/veranstaltungen/index.php?content=kurs&kurs=s1821470301\\_bc](http://www.bildungscampus.de/content/de/bankerscampus/veranstaltungen/index.php?content=kurs&kurs=s1821470301_bc).
- Zahorsky, D. (2008). *The Proper Business Letter Format*. *About.com Small Business Information*. Retrieved on 28 October 2008 from <http://sbinformation.about.com/od/bizlettersamples/a/letter-format.htm>.