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The intuitive process: the case of psychotherapy.

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Abstract

Intuition may be considered a common factor in psychotherapy characterizing both psychotherapist and client functioning. After reviewing existing models for intuition, a 5-phase model is proposed to explain the intuition based on the cognitive functions of pattern discovery and recognition. It is argued that intuition should not be viewed as a single phenomenon, but rather as a process in which the diversity of the phenomena labeled as intuition can be understood as belonging to different phases of this process. These phases consist of early knowledge representations, demonstrating the creative role that intuition may play in the construction of knowledge. This model is illustrated by presenting examples from the practice of psychotherapy. Finally the possibilities of promoting intuitive insight, the fallibility of intuition and the role intuition may play in integrative decision making are discussed.

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Experience persuades me that many people must
follow the same circle from intuition through
intellectual analysis to restored spontaneity...

-Yehudi Menuhin, 1977

Introduction

The psychotherapist who considers his methods and decisions exclusively the result of conscious reasoning is most likely mistaken. No therapist can reasonably deny following hunches, the occurrence of sudden insights, choosing directions without really knowing why, or the existence of uncanny feelings that turn out to be of great importance for therapy. All these phenomena are occurrences of intuitive modes of functioning. As Laughlin (1997) puts it: "Comparatively little knowledge is derived initially from conscious reasoning. Indeed, the very nature of our brain and its modes of producing our world of meaningful experience are inherently intuitive" (p.32). Thus intuition may be considered a common factor in psychotherapy (see e.g. Frank 1982; Weinberger 1993) characterizing both psychotherapist and client functioning.

In spite of the fact that intuition is a universally recognized experience, it is poorly studied in psychology in general, and remarkably little has been published about its role in psychotherapy. One of the reasons has probably to do with the strict division that has been made between intuition and reason, to the point that some authors claim that intuition is unscientific (e.g. Bunge, 1962; Weissman, 1987). For those authors who have written extensively about intuition (see e.g. Bastick, 1982; Westcott, 1968), it has proven difficult to go beyond the descriptive approach of this phenomenon, in the sense of explaining the existence of intuition and proposing mechanisms for its functioning. There is no cognitive theory about intuition. In fact, there isn't even a clear consensus of what phenomena should be classified as intuition.

In this article, first the different meanings of intuition will be reviewed. After this, some explanatory models of intuition will be discussed, arguing that intuition should be viewed as a cognitive function based on pattern recognition processes. A 5-phase model will be proposed through which the variety of phenomena that have been labeled as intuition can be classified according to the way knowledge is represented in each phenomenon. It will thus be shown that intuition should not be viewed as a single phenomenon, but rather as a process. The phases of this intuitive process consist of early knowledge representations, thus revealing the often-mentioned creative character of intuition. It is proposed that intuition is a common cognitive process and essential in the process of knowledge construction. The model will then be applied to the case of

psychotherapy. Different intuitive phenomena in clinical practice will be discussed, showing that intuition is an important tool for psychotherapy, and even essential for the encounter with the patient when the specificity of his character structure eludes theoretical models. Finally, some ideas about how to promote intuition and the limitations and fallibility of intuition will be discussed.

Different perspectives on intuition.

The first period in which intuition became a popular subject for scientific study is at the beginning of the 20th century when scientists were investigating several modes of scientific thought. It was the period of great discoveries in physics and mathematics, and consequently there was an interest in understanding the psychology of scientific genius (Wertheimer, 1945; Poincaré, 1913). An influential book was Hadamard's "the psychology of mathematical discovery" (1945), where he discusses the results of interviews with various scientists. Hadamard reports many examples of how intuition is an important factor for progress in the (mathematical) sciences. Though it was recognized that intuition could not be described along the classical lines of rational reasoning, it was considered the pinnacle of rationality, a peek beyond rationality that was only reserved for the genius.

The most common phenomenon that scientists report is the role that intuition plays as an important guiding principle for finding solutions to scientific problems. Intuition tells the scientist what directions are promising, where to search for a solution, and what directions are dead-ends. A second type of intuition Hadamard describes is the sense that something is lacking. Here something is known about a solution rather than the solution itself: the scientist for instance "knows" that there is a solution before knowing its contents, or senses that a solution is imminent. A third phenomenon he reports is the appearance of images, or kinesthetic feelings, which contain guidelines for the solution of problems. An example is Kékulé's dream of a snake biting its tail, which helped him to understand the circular molecular structure of benzene. Some of these images come up clearly and suddenly (Boucoulas, 1997), in other cases they are the product of a fringe process of ongoing images and sensations. Einstein gives an example of this: "The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be 'voluntarily' reproduced and combined. ...The above mentioned elements are, in my case, of visual and some muscular type." (Hadamard, 1945, p.142-143) Finally, Hadamard describes how he himself experienced illumination after an incubation stage.: "a solution long searched for appeared to me at once without the slightest instant of reflection on my part "(p.8). Many scientists mentioned that they would (sometimes intentionally) "forget" a problem they were working on, so that, after some time, ideas for a solution would pop-up at unexpected moments. Poincaré, describes the same experience of finding a long sought for solution when he entered a bus: " At the moment when I put my foot on the step, the idea came to me without anything in former thoughts seeming to have paved the way for it." (Hadamard, 1945, p.13)

In the sixties and seventies intuition was welcomed, quite differently this time, as the *counterpart* of rational thought (Westcott, 1968; Fischer, 1971; Bachelard, 1968). Now intuition becomes equal to listening to and relying on one's feelings, rather than one's mind. It starts to serve a political function providing an alternative to the rational-scientific modes of functioning characteristic of the establishment. Intuition tells you what is good for you, where to go with your life, what to eat, whom to trust or what to avoid. A frequently reported phenomenon in this respect is the sense of warning about danger. (Boucouvalas, 1997; Davis-Floyd & Davis, 1997). Recently this type of intuition has undergone a revival in new age movements (Lerner-Robbins, 1993; Vaughan, 1979; Devereux & Thompson, 1989). This has had impact in such fields as medicine (Miksaneck, 1993; Kenny, 1994) and management (Schultz, 1994; Agor, 1991; Foster, 1994), advocating that the professional should be led by his gut-feeling and inner compass in his decision-making.

Traditionally, intuition has always been valued in the arts as representing inspiration or creative source (Inglis, 1987). A friend of mine who is a photographer told me how he is looking for the "perfect" photograph. He already knows what he wants to express with it, and has some idea of the direction, but he doesn't know its final form.

Finally, a still different meaning for intuition can be found in experimental cognitive psychology, where it has the meaning of a guess in experiments where subjects, often children, are asked to give answers that are tentative or of which they are not quite sure (see e.g. Feldman, 1998; Flavell & Green, 1999). Here intuition represents poorly sedimented knowledge or a hunch. (see Spinney, 1998).

Summarizing these phenomena which have been labeled as intuition, at least 11 different meanings can be identified:

- A feeling of direction, of knowing, by the experienced scientist, whether a certain direction is "promising" or not.
- A sense of solution, a feeling that a solution is pending, without knowing which, or knowing that there is a better solution than the present one.
- Knowledge about a solution: something is wrong or lacking.
- The appearance of meaningful visual images/words/memories/kinesthetic images
- Incubation phenomena; the sudden appearance of a solution at an unexpected moment
- Warnings, uncanny feelings, foreseeing danger, which afterwards proves justified.
- Knowledge of what is good for oneself, inner knowing
- The first impression of a person with respect to trustworthiness.
- Gut feeling in decisions
- Hunches in selection and memory tasks
- Artistic inspiration and creativity

Some authors have attempted to overcome this diversity by proposing several other characteristics that intuitive phenomena have in common. Baylor (1997) identified immediacy, sensing relationship and reason as shared elements in intuition. Bastick (1982) mentions qualities such as a sense of correctness, immediacy, association with affect, global view, gestalt nature, preverbal character, fallibility and influence of experience. Identifying these common factors constitutes a preliminary step in moving from a descriptive to a causal level, but neither of these authors presents a functional model for integrating these common qualities. Arvidson (1997) shows how Bastick fails to account for the difference between "feeling of direction" and more comprehensive insight experiences. Monsay (1997) identifies a distinction between physical intuition, which is based on previous experience, and creative metaphysical intuition, which surpasses the current frame of reference. Jung (1936/1971) postulates intuition as one of the four universal and fundamental mental functions, the others being thinking, feeling and sensation. He conceives intuition as a directive and creative function but, again, does not go beyond the descriptive level: "On intuition, actual reality counts only in so far as it seems to harbor possibilities which then become the supreme motivating force, regardless of the way things actually are in the present" (p. 554)

In spite of this variety of phenomena described by the term intuition, Boucouvalas (1997) concludes that most authors seem to converge in defining intuition as: "direct knowing that seeps into conscious awareness *without the conscious mediation* of logic or rational process" (p.7).

Explanatory models of intuition

Some authors have presented models to explain the functioning of intuition. Several of these models center around the notion of tapping directly into some source of knowledge. This may be conceived as receiving knowledge from some higher source such as divine inspiration, collective unconscious, inborn knowledge or even telepathy. This can be commonly found in more religion-oriented theories or in writings in the new-age tradition (Hanna, 1993; Briggs & Mosher, 1994) Slightly less mystical, but still untraceable, is the idea of intuition being based on the personal unconscious, as proposed by several psychoanalytical writers (Shapiro, 1995; Reik, 1948).

Any of these solutions has the obvious disadvantage that, apart from the problem of being unverifiable scientifically, it does not shed any light on issues such as when, how, and in what form intuition appears in consciousness. What is needed is a model that can describe the underlying formal process that produces intuition phenomena. An alternative that can provide an explanation for the richness of form and modality found in intuition can be found in the cognitive functions of pattern recognition. Several authors have worked in this direction.

James (1890) in the chapter on "discrimination and comparison" hints at the association between intuition and the process of assessing similarity or dissimilarity: "But no matter how many may be the steps by which such inferential discriminations are made, *they all end in a direct intuition of difference somewhere*" (p.497). Reik (1948) observes: "A frequent part of our capacity for unconscious or preconscious perception is the observation that something is lacking, the subterranean awareness that something is not there." (p.141). Such an awareness would logically only be possible if there is a pattern that predicts that this "something" should be there. Rosenblatt & Thickstun (1994), within a psychoanalytical framework, propose that intuition can best be explained by (unconscious) pattern matching. Schooler et al. (1995) suggest that insight is based on pattern recognition. Schooler also shows how insight in tasks that require innovation seems to follow a non verbal path, since verbal activity interferes with achieving insight, whereas for ordinary tasks this interference does not occur. Root-Bernstein (1997) states that: "In essence, intuition is the ability of sensing an underlying order in things, and thus is related to still another mental tool that is indispensable to the working scientist: the perception of patterns, both visual and verbal" (p.116). Bohart (1999), in discussing the role of intuition in psychotherapy, states that " we detect patterns and rhythms in interaction"

If intuition is based on pattern recognition functions, it can be deduced that intuition should come in two forms, the recognition of a known pattern, and the diversion from a common pattern. When something is a known pattern, a feeling of recognition is experienced. When some perception is different from what we expect, our attention is caught. If we look at the above examples, we can distinguish phenomena such as hunches or feelings of direction that may follow from identifying matches with known patterns. Uncanny feelings, or the intuition that something is wrong or missing, most probably represent a diversion from known patterns.

In order for an intuition to be useful, it has to be unraveled, its meaning has to be understood. Within this model of pattern recognition, that means that the elements that initially made up the pattern have to be identified. As intuitions come in different forms and different modalities, some intuitions contain more information than others. An intuition in the form of an image contains more clues to its meaning than just an uncanny feeling. To have a sense of direction of where to look for the solution to a mathematical problem contains more information than a hunch. A sudden feeling of despair in the therapist contains more information than a sense that a certain issue should be inquired into more profoundly. The degree to which the elements that make up the pattern and the information about the structure of the pattern depends on the type of intuition. This means that the variety in intuition phenomena may be classified according to the amount of information they contain. It is thus more useful not to speak about a single intuition, but about an *intuitive process*, consisting of a sequence of phases, where, in each phase, the amount of information represented in the intuition increases.

Phases of intuitive knowledge representation

The various phenomena that have been designated as intuition may be divided into five phases, each with a different mode of knowledge representation. They form a sequence in which the amount of information contained in the intuition increases from one phase to another. Thus, with every phase, the specificity and discriminative potency of the intuitive phenomenon increases.

1. Detection phase.

A sign of something dawning in consciousness. Our attention is drawn to something, the feeling that something is happening or present. Often this phase is experienced as a feeling of confusion, alertness, or being disturbed or troubled. An example comes from Reik (1948) "something in the remark worked upon me as a kind of warning signal" (p.183). This is intuition in its most basic form, we feel something is happening but without any clues as to the "why or what".

2. Dichotomic awareness phase

The next type of intuition occurs when some of the quality of the intuition becomes to awareness. Most readers will recognize the quite remarkable experience that we may feel that something is wrong or that a solution is at hand *before* we know what it is or what it is related to: the experience is pre-gestaltic. This experience of this intuition may be compared to the experience of a lost thought; we know it's lost and have no clue what it was or what we were thinking about.

A host of linguistic everyday expressions can be found that refer to this dichotomic quality.

A negative quality may be expressed as "there is something missing", "something smells bad", "something odd is going on", "it doesn't feel right", "something is wrong".

A positive quality may be referred to as "a sense of solution", "something important is happening", "things are falling into place". Also the positive quality may be experienced as a sense of beauty.

This type of intuition is often described in crime fiction. A nice example of a transition from the detection phase to dichotomic awareness can be found in Agatha Christie's *Funerals are Fatal*. One of the characters, Helen, after repeatedly having remembered and feeling somewhat uneasy about the funeral suddenly realizes, in all clearness, that something is wrong: "There was something wrong with that picture [memory] Something...? Somebody...? Was it an expression on someone's face? Was that it? Something that- how could she put it? -ought not to have been there..? She didn't know.. she couldn't place it... but there had been something-somewhere-*wrong*." (p.19)

3. Related object phase

In this phase, it becomes clear to what objects (observations, ideas, events) the intuition is related, but in most cases we may still not know what the intuition is in itself. We are now able to identify elements that we sense or know to be relevant. These related objects give us a sense of direction as to where to look for solutions or meaning. An illustrative example, mentioned by Bohart (1998) during a workshop, was how someone can feel that something is wrong (dichotomic awareness) with his relationship (related object). At the same time, however, he can't tell *what* is wrong with his relationship. Another example can be found in ordinary conversation with for example, a friend, where we may feel odd afterwards, and are able to pinpoint certain remarks or subjects that seem to cause this feeling of oddness. It is quite remarkable that we can be quite sure about the relevance of these factors, without knowing how they are related to our feeling.

After one knows one is close to a solution of a (mathematical) problem, one may be able to identify some concrete elements or ideas that are connected to an eventual solution, before one actually has an idea of the structure of the solution itself. Wertheimer (1945) describes Einstein's thinking about the relativity of space and time: "He felt a gap somewhere without being able to clarify it, or even to formulate it." (dichotomic awareness). Einstein then started to investigate the notion of simultaneity, as if he knew that this notion would provide information about a solution for this problem. The physicist Feynman got fascinated by the wobbling movement of a soup-plate spinning in the air, but only much later discovered how it was analogous to other physical problems he was working on (Gribbin & Gribbin, 1998).

4 Metaphorical solution phase

Where, in the previous phase, one is able to identify some relevant elements, in this phase it becomes clear how these elements are important. The intuition presents itself in the form of images, words, or feelings, but authors reporting these intuitions seem to have a predominant modality. Reik (1948) for instance reports primarily auditory intuitions such as songs, words, melodies, poems and conversations, while for instance Monsay (1997) reports primarily intuitions of a kinesthetic nature. But the gestalt may also take the form of an emotional quality such as anxiousness, sadness, sexual arousal, tenderness or irritation. And finally it may be more cognitive such as a memory, fantasy, association or distraction. The husband who feels something is wrong with his relationship may experience a sense of being trapped or have an association with a newspaper article on a man condemned to a life sentence. The mathematician may feel that there is a "short-cut" available for the problem he's working on. A businessman may get the feeling that he "shouldn't do it".

The knowledge about the intuition is increased in the sense that some of the solution itself is now revealed, but still in a veiled form. Though a gestalt is now perceivable, the explicit meaning of these gestalts in relation to the solution still has to be unraveled. Whatever the form or modality of the gestalt, its meaning has to be decoded. Monsay (1997) illustrates this non-verbal character of this phase: " I usually perceive it as "knowing", or feeling or image before any words or equations can be employed" (p.105). These images or

associations that appear usually "help", in an analogous way, to clarify the intuition. The mental images hint at the meaning in a metaphorical or "as if" form. The song that comes to mind may have relevant lyrics, or point to a relevant state of mind. The gesture made me feel waved away, unimportant, does the client take me seriously? How does the torus image relate to the mathematician's problem, being able to travel circularly in two different directions?

5 Explicit verbal understanding phase

At this stage, the intuition is completely understood. The meaning of the intuition is now completely clear. This meaning has become clear through identifying the elements that made the proposed metaphor or concept fit. The husband understands that his feeling trapped in his marriage can be exemplified by many instances where he inhibits his wishes and abstains from certain behaviors for fear of criticism by his wife. The mathematician discovers how the torus adequately models the intermixing circular movements present in the phenomenon he is working on, and how the mathematical description of a torus has to be adapted to his problem

I would like to relate an experience that not only illustrates how I reached the phase of explicit understanding of an intuition, but also the importance of verification of this understanding. (The phases of the model in this illustration and in the remainder of the article will be indicated by numbers in straight brackets.) *One night I was out with friends in a restaurant, and we ordered a bottle of house-wine. Since we quite liked the wine, half-way through the meal we decided to order another bottle. When the waiter brought the bottle in a cooler, he quite elaborately apologized for bringing the wine already opened, attributing his "mistake" to automatism. This whole scene somehow struck me as odd [2]. Why did he say that? That remark about having opened the bottle seemed strange to me [3]. It was somehow superfluous and unnecessary [4]. I tried to find an explanation. Probably it was a lack of knowledge of the etiquette on my part. I had never given it any thought, really, but in fact bottles are usually opened at the table. The correct procedure seems to be that first the bottle is shown to the drinker, and the client confirms his choice, then the bottle is uncorked, a little bit is served for tasting and after approval the wine is served. It was probably good etiquette to also open a second bottle at the table. The waiter had seemed a bit nervous, so he must have been afraid of a reprimand, and had therefore so circumstantially apologized in order to correct his error [5]. It was in fact a classy restaurant, so that also explained why, on other occasions, I had never noticed this etiquette. I was quite pleased with my explanation and convinced that the problem was my ignorance about etiquette, until I tasted the wine. It was much inferior to the first one we had drunk, and now I understood that my hypothesis had been wrong. The apology had indeed been overdone, and was not to correct an error but to conceal the fact that the wine had been switched for an inferior one. My intuition had been correct but my interpretation had failed.*

This proposed 5 phase model has the following implications:

Intuitive phenomena can be classified according to their knowledge representation

It permits ordering the variety of intuition phenomena, while simultaneously demonstrating at what level the knowledge is represented in the different intuitive phenomena.

Below follow two examples that I found in the literature to illustrate this point. Reik (1948) describes the following process: "As I was writing the dream-interpretation, I had the vague impression I was omitting [2] something in my thoughts or in the description of the situation that led to the production of the dream. I had forgotten something or skipped [2] over something, but what was it? I knew where I had to search for it, but couldn't find it. It was somehow connected [3] with the reproach I had made to my wife: that she was responsible for the fact that I had to suffer so much from the heat. I knew that this reproach was to some extent unjust, but to what extent? I had the uncomfortable feeling that I was myself more responsible than she, but how? [3] I knew I ought to correct the mistake in the presentation here; I knew I had made a mistake[3], but I didn't know what to add or what to replace. (...) the reminder, which I could not brush aside, was itself irksome. A strange comparison came to mind: it was as if some man occupied with serious work is annoyed because a little boy, his son for instance, pulls him by the sleeve to call his attention to some insignificant thing [4]. (..) it was the understanding of just this "stupid" comparison which at last gave me the clue to what I had suppressed. [5]" (p.60)

The second example is from Monsay (1997) who writes about a scientific discovery: " I suddenly knew I had the solution to our problem [2]. First came this "knowing", then an essentially kinesthetic feeling for what was involved[4] , and finally, the words to describe the invention[5]" (p.104)

Though the order in which these processes appear in consciousness seems rather fixed, there is at least one exception possible: the unfolding meaning phase may come before the related object phase.

For example: A client may first feel trapped and lost in his life (4), and only later be able to identify that it has to do with his professional situation(3). When certain phases do not occur, it doesn't mean that representations belonging to previous phases are not present, but rather that they are covered in one stretch. Take, for instance, a client who reports that his coming to therapy reminds him of "traveling as a child alone on a bus for the first time". The detection, dichotomic awareness and related object phases are implicitly present. Considering the extreme case where complete verbal understanding is reached immediately, where the intuition is completely understood and its reasons and relevant instances are immediately available, it ceases to be an intuition! Here it would be experienced not as an intuition but simply as an idea or a thought.

The model opens the possibility of investigating intuition as a cognitive process.

The model describes phenomenologically how, in each phase, knowledge is represented in increasing levels of complexity. This also opens the possibility to describe these phases in terms of known and well-documented cognitive functions. The detection phase can be related to functions of arousal of attention. The dichotomic phase most likely mimics processes found in pattern recognition and discovery. In the related object phase the intuition seems to be associated with concrete elements of episodic memory, whereas in the metaphorical solution phase the intuition is related to more conceptual elements from semantic memory. Finally, explicit verbal understanding may be investigated in terms of the cognitive function of reasoning.

It demonstrates the creative character of intuition.

Intuition is not a single phenomenon, but rather a process of early stages of knowledge representation. It is instrumental (and may be essential) in the construction of knowledge itself. It thus shows how intuition is of a creative nature and allows the investigation of the creative process in various stages. When considering these phases, the issue comes up of whether these stages should be viewed as a discovery or as a construction (for this discussion see also Bohart, 1999). It may be argued that detecting a pattern match (or a lack of this match) and the unraveling of its meaning is not creative, since the pattern did already exist. But this is not the whole argument. Any pattern to be detected has to exist mentally before it can be compared: it is in the creation of this mental representation of this pattern that a truly creative act lies.

It demonstrates that intuition is a fallible process.

Several authors have reported the sense of correctness and certainty that often accompanies the experience of intuition. (Bastick, 1982; Monsay, 1997). Poincaré said for instance: "I felt a perfect certainty" (Hadamard, 1945, p.13). Conceptualizing intuition as a process based on pattern matching makes clear that it is as fallible as any other cognitive processes. False positives and negatives are liable to occur, and intuitions thus need to be verified. The person has to test with reason if the concept implicit in the metaphorical solution phase is adequate to reality or not.

Intuition in psychotherapy

Several authors writing about psychotherapy have touched on the subject of intuition, but relatively few have made it the center of their writings. The first one to write extensively about intuition, and who elaborated its usefulness for clinical purposes, was Reik (1948). He clearly was an auditory person, because most of his intuitions come in auditory form, like words, names and songs. He also chose an auditory

metaphor to describe intuition: "listening with the third ear". In the psychotherapeutic situation, therapists may have intuitions about diagnosis, possible interventions, personality or socialization factors of a particular patient, recognizing similarities or detecting dissimilarities of a combination of features of other patients. Characteristic of intuition, however, is the fact that we are not aware of the individual elements in the situation which make up the pattern; we only sense the fitting or non-fitting gestalt. Reik (1948) elaborates a number of elements that usually go unaccounted for but make part of the therapist's unconscious perception of the patient: "peculiarities of features, movements, dress, gestures, tone of voice, olfactory nuance, sense of touch while shaking hands, warmth, clamminess, softness, smoothness, the way a person looks, glances and looks. Muscular twitching in the face while speaking, breath, choice of words, tone of voice, little stresses on certain words, loudness of voice, vocal modulations, rhythm, accent (and most important the combinations of these particularities) subliminal perception, our instinctual feeling or reaction towards a person (slight annoyance after the patient has left) feeling bound/hypnotized /lightly impressed, the remarkable pleasantness that a patient can transmit." (p.135). He then specifies further: "there remains, to lead us in our search [for unconscious secrets], only what we call intuition, that is experience, which has become unconscious. Intuition serves us like a blind man's dog" (p.273). In numerous examples he demonstrates how he, as a therapist, uses this instrument. Reik doesn't put intuition above the "proper" analytic technique, but views it as essential for being an effective analyst, and discovering or understanding things about the patient that in other ways would not be possible: "But only he who is entirely himself, only he who has the sharpest ear for what his own thoughts whisper to him, will be a good psychoanalyst." (p.271). Most dynamically-oriented authors have taken this stance towards intuition as a complement to rational procedures. Shapiro (1995) for instance advocates "creative intuition alongside analytic discipline" (p.7). Lomas (1993) sees intuition as a quality "that greatly enhances their capacity" for psychotherapeutic work. More specifically he indicates the usefulness of intuition for timing interventions such as determining when the patient can and should take responsibility for her actions. . Wachtel (2001) discussing the often overly rationalistic approach of psychoanalytic psychotherapy, remarks: "Knowledge often is advanced in important ways by attending to intuitively grasped coherences that are not yet accessible to operational definitions". Rosenblatt & Thickstun (1994) give a slight primacy to intuition: "It is our contention that the experienced "expert" psychoanalyst, in developing understanding, relies more on intuitive pattern-matching from a vast storehouse of complex behavioral and rational patterns that reflect underlying dynamic constellations, than on theory-based procedural rules."(p.712), but they warn: "On the other hand, intuition without subsequent checking within some framework is more likely to lead to 'wild' analysis"(p.713).

Hellmuth Kaiser (1965) does not specifically refer to intuition, but describes an intuitive procedure that is closely related to the dichotomic detection phase. He refers to how, usually after talking to a patient for several sessions, a sense of oddness or strangeness invades the therapist about the way the patient is communicating. Somehow the patient is not talking "straight". He describes how this sensation is followed by another phenomena that can closely fit the metaphorical solution phase: the appearance of a new gestalt

perception of the client (p. 50). Rogers (1986) clearly gives primacy to intuition: "As a therapist, I find that when I am closest to my inner, intuitive self, when I am somehow in touch with the unknown in me, when perhaps I am in a slightly altered state of consciousness in the relationship, then whatever I do seems full of healing," (p.130). An author for whom the intuitive process is at the very heart of the therapeutic technique is Gendlin (1981,1996). The focussing technique aims at giving (explicit) meaning to the initially non-verbal, bodily-felt sense. This parallels the process described above, but Gendlin does not distinguish formal phases; he is primarily interested in devising a technique for extracting meaning from experience. Many elements of his technique can easily be fitted into the knowledge representation model. For instance, the question of listing things that are keeping one from feeling absolutely content and the "felt sense" of these problems, probes directly for the type of experience as found in the dichotomical awareness phase. The searching for a visual or auditory "handle" to describe the quality of this feeling narrowly fits the metaphorical solution phase (cf. Gendlin, 1981, pp. 43-64). For Bohart (1999), who also comes from the experiential tradition, intuition is an essential instrument for effective psychotherapy. He extensively writes about the role of intuition and the need for creativity in psychotherapy. He argues that "rather what I extract perceptually and intuitively from lived experience is far more compelling than thought information" (p.294), and is therefore the preferred mode of functioning for the moment to moment process of psychotherapy. Finally Caspar (1997), who researched the use of intuition and conscious analytic processes during clinical intake interviews, concluded that therapists perform better when they make use of both conscious-rational-analytic and intuitive processes.

Intuition has been this author's company for many years, and it has proven to be valuable in many ways. I consider the contribution of intuition in many cases complementary to theoretical and rational approaches, but on several occasions it has proved essential for arriving at decisive insights about my cases.

To start with, I will give an example that illustrates how intuitions appear and can be developed during a psychotherapy session: *I was seeing a client who was unable to refuse any request, was always helping people, but at the same time felt resentful that people didn't see what she herself needed. Any intervention for change was systematically countered with the argument that she "was like that", smiling somehow satisfied, revealing a subtle pride in her behavior. During one of these "battles", the image of sharing food came spontaneously into my mind. After some thought, I understood it could be used as a metaphor for her behavior. I then asked her to imagine a "cake of happiness" and how she would divide it between herself and another person. She said she would give away first what the other person would need, and then eat what was left. I then suggested that she was only good enough for the leftovers (provoking her). She responded that if others would be like her, things would be distributed more fairly. When she said this I felt confused by her argument, and moments after that I "knew" that something was wrong with this argument. The next thing that occurred was my realizing that my confusion had to do with something she had said earlier. Finally, I remembered what she told me, and understood immediately that there really was a contradiction: she had*

offered to help a friend financially, but had hidden from her friend how badly she needed the money herself, because if he had known she was short of money herself, she thought he would not have accepted, because "he was just like her"! I confronted her with this contradiction. Only later did I understand the importance of this intervention in helping to show her own active participation in maintaining "unfair" situations.

In this example, we can see various important aspects:

Firstly, there are two instances of intuition, each of a different level of knowledge representation: the first is the image of sharing food, which is of the unfolding meaning level. The second is the confusion about her argumentation that starts off at the detection level. It can also be recognized how both intuitions have to be decoded to be useful. The metaphor of food has to be understood as useful in describing her functioning. In this example, the understanding was relatively quick, but sometimes it can be laborious, taking several days. I usually do not share these intuitions with patients until I understand their meaning, because I want to be able to foresee the impact they may have, and I want some proof of their correctness (see next section). In the second occurrence of intuition, all the phases from the model can be identified: the feeling of confusion (detection), knowing something was wrong with her argument (dichotomic awareness), realizing that it had to do with something she said earlier in the session (related object) and, finally an explicit understanding of a contradiction through remembering what she said. Obviously, this example is a nice one, and in other instances not so many phases may be present or are so clearly identifiable.

For some psychotherapists who do not commonly make use of intuitive resources, it may be difficult to understand what experiences to look for. Intuition takes place in an intimate world, so subtle that we hardly ever take notice of its existence. Even more rarely is it communicated, and almost never is a description of it attempted. It is a factory of pieces of thoughts, images, vague feelings, where the raw materials seem to float around half-formless, a world so often present, though we hardly ever visit it. But some of these floating elements come to stand out, gain strength or show-up repeatedly. When exemplified, they may be easier to recognize and cross the border of consciousness. For this reason, a selection of examples relevant to the psychotherapeutic situation will be presented. Many of these examples stem from the writer's psychotherapeutic practice, others are taken from the literature. Some of the examples may partially overlap other examples.

Examples of intuition in the detection phase

-Lingering feelings

It may take several sessions before we acknowledge a feeling, which, once recognized, we remember to have been faintly present for weeks, but which we didn't fully attend to and it slipped away again.

-Feeling confused

Sometimes during the sessions, the client's attitude or narrative leaves the therapist confused. This may be the first sign of something important that is going on.

-Sense of importance

Having a sense that something is important, or that something is happening. The therapist cannot yet say why, and sometimes not even what, but somehow he is alerted.

It is a sign for the therapist to stay with the subject, or not to interfere with the patient's discourse.

Examples of intuition in the dichotomic awareness phase

-Feeling of contradiction

We can feel that something is not right in the reasoning or justification of someone. As Bohart (1999) put it: "the sense that there is something wrong in the flow of an argument" (p.295). Only after some pondering can we understand where the flaw or fallacy resides.

-Global feeling of the case

I try to keep in close touch with my general felt sense of the case. I "know" when a case is on track or when something feels "off". I don't like the way things are going: something is not going well, or too well. Any uncanny feeling the therapist may have about a case.

This feeling is the marker for "thinking " seriously about a case or bringing it to supervision

-Feeling of incompleteness

The client is talking about a subject, but it feels as if something is left out. The whole of the situation doesn't make sense. Something appears to be missing. Kaiser (1965) refers to something very similar when he gets the feeling that the client is not "talking straight"

-Change in the process

Feeling that something has changed either during the session or from one session to another

Bohart gives an example of something that has changed for the worst: "the sense that something is wrong because we can pick up the subtle change in rhythm" (p.295). One may also feel that something has changed for the better. The patient is relating to me in a different way, which may represent growth or therapeutic progress.

-Sensation of oddness

Uncalled for justifications, unexpected acts, unexpected emotions, odd phrasing, using unexpected verbal tense. A client when talking about a friendship said: "We were building a *life* together." The word life is odd, since it would fit more in the context of talking about a marriage than a friendship. Another client said "even

my mother noticed I was not feeling well". Other examples of this kind can be found in the work of Shapiro (1965, 1989).

Examples of intuition in the related object phase

-Standing out

When, during sessions, amongst many words, movements, phrases, thoughts, suddenly one stands out. The therapist may feel that a client's hand movement is pregnant or full of meaning. Things may alert me often without my having a clue about why, but as a rule I inquire of the patient at this point to see where it leads. The therapist may, for instance, feel that a certain gesture or facial expression is very typical or meaningful in a particular patient. At other times, the therapist may be fascinated by some tiny detail of a patient's story. A client mentioned that she liked painting, and somehow I felt that this stood out, this proved, in fact, to be a clue to a central aspect of her problem. She was a very sensitive and creative person always dreaming and creating things. She had never understood her true nature, had the wrong profession and continuously blamed herself for being distracted, dreamy and unpractical.

-Incongruence

Detecting discrepancy between the client's claims about himself and his acts or when verbal and non-verbal communication are at odds. Rogers referred to this as incongruence (1951). Kaiser (1965) referred to this aspect as duplicity when a patient claims he desires something but fails to undertake the proper or expected action to attain these goals. At other times, the patient may sometimes simply not be convincing, trying to be something he is not (Shapiro, 1965, 1989).

Examples of intuition in the metaphorical solution phase.

- "Knowing" facts about a client's life

Reik (1948) states: "We know things about a person and have no inkling of how we know them." (p. 272) He gives examples of how he "guessed" that a client had had a miscarriage, from a patient noting a book standing upside down in his bookshelf.

-Physical sensations

The therapist may feel physical pain or stress during a session that either is also felt by the patient or is symbolic of the patient's feeling state. Examples are a tendency to cry, pain in the stomach, tense shoulders, and difficulty in breathing.

-Images

While talking with a client I may think of a city. The spontaneous images of Botticelli's Venus led me to discuss romantic issues with a patient; images of a building in Amsterdam may draw attention to more unconventional aspects of a patient. These serve as a hint, and I may direct the conversation to art or to rebelliousness or to related topics to see what happens. The more unexpected or unconnected they are the more meaning they eventually seem to reveal. An image of a client lying on the ground or bent over, like Van Gogh's "Sorrow".

-Words

Words, poems or lyrics may come up spontaneously, containing information about the ongoing therapeutic process. Reik (1948) gives examples of a children's rhyme that helped him to understand countertransference feelings.

Shapiro (1995) recounts how a patient told him about an interpersonal encounter where the other person had backed off from an interaction that the patient had thought playful: the analyst thought of the expression of "playing it too rough". On sharing this with the patient, childhood memories of playing it too rough came up. He recognized that the therapist himself, in the countertransference, had also felt the same pattern as playing it too rough. The therapist was then able to find various "supportive data" (p.709) in the analysis of the client

-Melodies

Sometimes a melody comes up of which the lyrics bear relevance to the process at work. A song by REM that spontaneously came up during a session which contained the text: "readying to bury your father and your mother", made me realize that I had talked with my patient about his mother, but never about his father!

-Distractions

Not seldom, a therapist may be thinking of something seemingly unrelated, but it turns out to be symbolically related to what the client is talking about, or sheds light on the interpersonal process of that moment. Examples may be, something that happened to me, a program I saw on television or a recent news topic or political development. Bohart calls this: "thoughts that come unbidden" (p.304)

-Fantasies

I sometimes may have fantasies of doing certain things with my clients like walking, eating, or hugging. These often imply detecting some kind of need of the patient. For example, I once fantasized dancing with a client, which proved to be a clue for the client wanting to be led, oriented.

-Comparisons

One client may remind me of another one, of important persons in my life, or of a famous person. During one process, the idea forced itself upon me during many sessions that the client physically resembled a famous rockstar. This set me on the trace of narcissistic elements in his character, and later even similarities in life events with this particular rock star. Only after I recognized its importance did this idea became less intrusive.

-Impressions

Experiencing the client during a particular session as childlike, old, beautiful, strong, vulnerable, badly dressed, sexy. It once struck me during a session that a little spot under a patient's eye resembled a tear; only later did I understand that her overall mood that day was extremely sad.

-Emotions

Sudden appearance of a poignant feeling of sadness, anxiousness, pride, feeling pressured, feeling seduced or flattered. The therapist who feels anxious may come to understand that his feeling is not only his own security but also a reflection of the patient's insecurity about something.

-Action tendencies

Sometimes it is rather the action tendency than the feeling component of the emotion (Greenberg & Safran, 1987) that is present in the intuition. We may want to retaliate, cancel a session, or call a client in between sessions.

Shapiro (1995) describes such an instance: "My intuition came to my rescue. I suddenly had a strong image of myself sitting next to her on the couch. Without thinking, I got up and went to her, sat next to her, and put my arm around her" (p.144).

-Stereotypes

A client sometimes may strike us as a stereotyped figure, which metaphorically informs us about his or her character: a porcelain doll, a Greek philosopher, a soldier, a Cinderella, or a farmer. Sometimes meaningful nicknames spontaneously turn up when discussing cases in team meetings. Omer (1994) often uses these fairy-tail figures or other stereotypes in his story-letters to open a therapeutic process that is stuck.

-Warning

At other times I suddenly remember a client before going to sleep or while driving

Ex: At night I suddenly thought about a session I had had during that day, and I felt a warning feeling. I had to be careful with her smile. I'd seen that before. As if she did not take it seriously. Yes there was definitely something disqualifying about her smile. As if it said, yeah this is all very nice what we are talking about, but it won't work. Yeah, I have to inquire about her smile.

In the above-mentioned examples, intuition functions as a guideline, a warning or a clue that occurs during the process. The value lies in enhancing the efficiency of the therapeutic process, since the therapist might have arrived at the same conclusion through ordinary processes.

In other situations where creativity is required, intuition may turn out to be of key importance. These situations Safran (1990, 2000) describes as therapeutic impasses. It is the moment when the therapist feels completely stuck and lost in a case. Safran explains this phenomenon as the therapist being strung in the (dysfunctional) interpersonal cycle of the patient. The reason that intuition is essential in this phase is that there is no rational way out, since the known theoretical models fail to describe the patient's functioning. The process at that point is dealing with such a specific and idiosyncratic way of functioning of the patient that it eludes theory. There is no other way out than a truly creative process trying to understand the unique aspects of the client's personality and functioning.

Safran mentions several intuitive phenomena (feelings, fantasies etc) that can be helpful in the resolution of the impasse. Though often difficult and painful, there is something very beautiful about this moment in the sense that it is the starting point for a true encounter between the therapist and the patient (see Buber, 1923/58). It is a very intimate moment, in which we meet the patient in his individuality and get to know aspects that are truly unique for this patient.

It is somehow comforting to know that, to a certain point, we can't fit a human being completely into our theoretical models, which is a moment of original encounter, where we have to leave all theory behind in order to meet and understand this person in front of us.

Intuition and technique

Since the occurrence of intuition is largely spontaneous, it is rather difficult to devise a "technique" for promoting intuition. Intuitions usually represent experiences that are somehow on the fringe or parallel to our conscious and willful activity. As Nietzsche put it so nicely in *Thus spoke Zarathustra*, there are "thoughts that come on dove's feet". The previous chapter was intended to alert the reader to the possible forms and modalities of intuitive phenomena in psychotherapy so that they may be more easily recognized. But is there anything else that can be done to promote intuition?

Intuition is certainly influenced by the will, in the sense that it depends on the therapist's willingness and effort to acknowledge whether he notices intuitive phenomena or not. However, the frequency with which intuitions occur also seems related to a person's motivation and interest. One does not get intuitions randomly about anything, but about things one is interested in, things relevant to one's life. It is this author's

experience that interrogating oneself consciously about issues concerning the therapeutic process stimulates the occurrence of intuitions relevant for these questions.

Several questions I have found to be particularly useful in this respect: The first question came from reading Kaiser's work on psychotherapy (1955,1962,1965). He argues that psychopathology is marked by a communication where there is something odd in the clients communication. He suggests that the therapist ask himself: "How is this client not being straight with me?" An equally useful question that David Shapiro (1994) suggested to me was: "What is this client trying to do with me?" A question that is central to Safran's (1990, 2000) work is: "How do I feel at this moment in the interaction with this client?" A question that I derived from the work of Yalom (1989, 1997): "How am I not being completely honest with this client ?" When I have felt lost with a client, one of these four questions has invariably helped me develop intuitions of what was going on in the therapeutic process.

Another "technique" that has been mentioned by various authors as a key to the detection of intuitive phenomena lies in modifying the attentional stance. In the authors' experience, their detection can be stimulated by being attentive to those experiences that are slightly off-center of our conscious mental activity. It may thus be helpful not to be too focussed on the therapeutic task. Freud (1912) probably had something similar in mind when he advocated that analysis should be done with 'evenly hovering attention': "It ... consists in making no effort to concentrate the attention on anything in particular, and maintaining in regard to all that one hears the same measure of calm, quiet attentiveness" (p.111). Safran (2000) refers to this attentional stance as mindfulness, a concept stemming from the Buddhist tradition, which he defines as "directing one's attention in order to become aware of one's thoughts, feelings, fantasies, or actions as they take place in the present moment" (p.57)

In exemplifying the model for the case of psychotherapy, this section has focussed mainly on intuition as a phenomenon occurring with the psychotherapist while he/she is doing his/her work. Obviously there is also the intuition at work with the patient. I mentioned, for instance, Gendlin's focussing technique, which helps to detect intuitive experiences in the patient. The model can be applied to this technique in order to accompany more systematically the meaning-making process that takes place within the client, prompting for knowledge representations as yet absent in the patient's experience.

I'll give a verbatim excerpt from a therapy session to illustrate this point:

The client is a young homosexual man who has been stuck in a highly unsatisfying relationship with a man of his age for over a year. His partner has always refused sexual contact, and has even refused physical contact for almost a year. Though there is not even a formal commitment from the other party, the client keeps seeing the man almost daily, fantasizing about better times to come and in spite of some "efforts" to

leave him, is not able to end the relationship. The client insists that the man loves him, but is not able to show it because he hasn't accepted his homosexuality yet.

Somewhat out of the blue, the client remarks that the last time he went out with his boyfriend and another friend, something was "wrong" and that he felt "bad". The therapist decides to follow this lead because of the emotional intensity he senses in the client's words.

T: -You felt bad in what way? (Therapist prompts to see if the client can move directly to the 4th level of metaphoric representation)

C: -Somehow lost, disoriented (The client seems to be searching, the answer is not convincing, the client is still stuck at the 2nd level)

T: -Was there anything in the situation that was causing this feeling? (prompt for related object)

C: -He (boyfriend) didn't look at me. (quick and sure answer)

T: -What did that cause in you? I got the impression that feeling lost or disoriented did not completely describe your experience. Is there any better word you can think of? (Prompt for emotional representation)

Client comes up with worthless, useless, and superfluous

(While the client is struggling the therapist at this point notices a parallel with client's account of being neglected by his parents, of whom he felt that they didn't see him, which helps the therapist to suggest a word)

T: -Would "unnoticed" fit?

C: -Yeah! (Big smile of recognition)

T: -You know Fred, this reminds me of what you told me of your parents, who didn't take much notice of you.

-Client starts crying like a child, saying in what seems a mix of anger and despair: "but they loved me"

T: -So why didn't they look at you Fred? Wouldn't you look at someone you love?

-Period in which the client continues crying.

T: -Maybe now can see that they loved you, but as a child it would be hard to come to any other conclusion than that they did not love you.

A final remark about the importance of intuition for psychotherapy integration is similar to the one made by Martin (1997). Apart from its common factor status, intuition may play an important role in integrative clinical decision-making. Intuition is, apparently, the process the mind uses to deal with new and complex information. Integrative therapists are faced with a plethora of factors such as: research outcomes, client characteristics, problem features, therapist attributes, the ongoing therapeutic process and all these factors in face of different theoretical frameworks and their particular conceptualizations, which have to be taken into consideration for clinical decision making. For this moment, I will sidestep the inherent suggestion from the previous phrase that for non-integrative therapists working from a single theoretical base clinical decision-making is a clear-cut and obvious process. Clinical decision making is, certainly, for the integrative psychotherapist a major concern. Intuition may be the "methodology" that in practice most integrative therapists use to select from the eclectic base of available analysis options and decide what approaches or

interventions to use on a moment by moment basis. The present model of the intuitive process may contribute to teach and evaluate this intuitive integrative decision making.

Conclusion

The presented model conceives intuition as a common cognitive process of early knowledge representations based on pattern recognition. Intuition may be a window to the genesis of knowledge. It thus presents an alternative for more mystical interpretations of intuition, and counters its often-acclaimed infallible nature. Intuition provides a valuable complementary instrument for the psychotherapist and other professionals to go beyond theory-driven activity. The distinction of the various phases may help to clarify the knowledge representation found in different types of intuition, and thus provide clues to more systematically unraveling its meaning. It brings intuition back into the realm of science and opens the possibility for serious research on its workings and how it can be improved.

Several questions still remain to be answered. Firstly, there seems to exist an inner compass, which accompanies the decoding process of intuition, and which needs further investigation. While looking for the correct interpretation or wording for an intuition, there is a feeling indicating the correctness of the proposed meanings or directions. Gendlin (1981) for instance describes how finding the right, "fitting" verbal expression is accompanied by a feeling of relaxation. This phenomenon is reminiscent of the notion of "feeling of knowing": a measure for the certainty we have about the correctness of our knowledge (Hart, 1965; Koriat, 1993). It may also be related to the somatic marker hypothesis of Damásio (1994), which gives a sense of appropriateness or relevancy to our experience.

Secondly, the relationship between intuition and creativity has to be clarified, since not all intuition seems to be creative. Creativity as a hallmark for intuition has been argued by many authors (Bastick, 1982; Bowers et al., 1995; Hayes, 1989; Koestler, 1964). But Bohart, for instance, incorporates mechanistically performed acts in the concept of intuition. From the perspective of intuition as acts without conscious mediation, these acts would certainly classify. Bohart argues that these acts imply creativity. For instance, driving a car, which can be done for long periods without conscious attention, implies a creative process, because "no new situation is exactly identical to a former situation"(p.291). It has to be recognized that a model of mechanistically applying concepts may not be adequate, and that there is certain flexibility and even recreation involved even in the most simple behaviors (see for instance Finke et al., 1992) This author, however, would prefer not to label situations like car-driving or dish-washing as creative to avoid erosion of the concept.

A case may be made that there exists a second kind of intuition, which is less creative. A worthwhile contribution in this respect has come from Monsay (1997), who distinguishes physical from metaphysical intuition. Physical intuition is the experience-based gut feeling that helps the scientist to solve problems

within an established paradigm (see also Kuhn, 1970). Metaphysical intuition is true creativity appearing when there is a need to go beyond the paradigm, especially when elements from outside areas are important for a solution. Caspar (1997) finds a similar distinction; when observing psychotherapists conducting clinical interviews he finds 3 factors: analytic processing, intuition and automatization.

Both modes of functioning may be part of a single cyclical process of knowledge construction and implementation. After the phases of early knowledge representation of a creative process have been completed, the knowledge has come to maturity in a verbal explicit representation. After this phase, still another mastery phase may be hypothesized in which, for efficiency reasons, the process becomes automated, and the individual acts without conscious contemplation. Here, the experienced professional, such as a psychotherapist or Bohart's example of the surgeon who operates best "without thinking", may impress by their fluent and seemingly effortless resolution of complex problems. Csikszentmihalyi's (1990) concept of "flow", which is associated with efficient action where metacognitions are absent, seems to describe quite precisely this mode of functioning. The moment that the normal pattern of automatic functioning is sensed as not fitting any more signals the beginning of a new cycle in a creative process.

Monsay's wording "physical" and "metaphysical" intuition, though intended to indicate exactly this distinction, are in themselves not very clarifying. It may be that "creative intuition" versus "applied intuition" would be better.

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