

Experimental Protocol : Therapeutic Touch

Introduction

"Mr. Z." contacted us in June 2003 in order to establish a serious experimental protocol that could potentially provide the basis for a future publication. He explained that in the context of his practice of touch therapy he feels a "signal" or "fluid" with his hands. He sought our help in measuring such "signal".

In the following text, we have used the terms "fluid", "signal" and "phenomenon" interchangeably to designate the phenomenon under observation.

During the course of preliminary discussions between Mr. Z. and the Observatoire Zététique, it quickly became clear that, because the experimenters were not familiar with the precise characteristics of the phenomenon, it was advisable to observe it prior to measurement and then formulate hypotheses as to its nature. Measurement could then potentially be undertaken in a third phase.

1. ELABORATION OF THE PROTOCOL

Mr. Z.'s practice depends largely on subjective validation parameters: the fluid is sensed either around the area affected by a given pathology or in the vicinity of the source of the problem. For example, ankle pathology can be the cause of muscular tension in the neck; thus the signal might be perceived either in the ankle or neck area. This complicates any attempt to identify the signal by comparison to objective means of observation (e.g., scanners, X-rays, MRI and so forth). The same is true of treatments carried out by means of "magnetic passes": the area to be treated cannot be determined by reference either to the affected area or to the area deemed to be the cause of the pathology. Moreover, a validation based on the sensations of patients would be lengthy and difficult to implement, and would not furnish a satisfactory solution to the problem of observation according to objective parameters.

Following several weeks of reflection and telephone exchanges with Mr. Z., we managed to identify the following constant parameters regarding his practice:

- the signal is perceptible through clothing
- the location of the signal is stable with respect to a single patient and for a given time period (in excess of one hour)
- the signal linked to a patient does not leave any "magnetic imprint" on the massage table (otherwise, the successive examination of two patients would be impossible in the absence of an intervening rest period)

Based on these assertions directly concerning Mr. Z.'s practices, it was agreed that the following hypothesis would be tested: "In a double-blind setting, the therapeutic touch practitioner is able to determine the presence or absence of a patient provided that he has previously identified, in terms of strength and location, the signal emitted by such patient."

2. PRELIMINARY TRIAL

An initial meeting was organized for Monday, November 17, 2003 in the town of Revel (located in the Isère department). It gave rise to a fascinating conversation concerning the practitioner's art, followed by a discussion of the details of the protocol. Mr. Z. next tested each of the nine participants; the objective was to identify a person who emitted a particularly easy-to-detect signal, so that such person might later be used as a test subject for the final experiment. A signal was detected for each of the participants in various places, but none of us truly stood out from the group. One of the OZ members noted the areas identified by the practitioner for each of the nine subjects.



Finally, the organization of a blind preliminary trial was proposed, which Mr. Z. graciously accepted. His eyes were blindfolded, and the participants passed successively under his hands again, in random order and silently. Once again, a signal was detected for each of the nine test subjects. We then proceeded to verify whether the areas indicated in the blind test corresponded to the previously identified areas.

The experiment was a failure. Out of the nine attempts, only two were successful. And Mr. Z., in perfect good faith, even explained that he had recognized one of those two persons by the smell of her perfume. We noted that certain areas that had not been indicated in the first trial were identified in the second.

We parted disappointed, but not discouraged.

3. FINAL EXPERIMENT

The second meeting with Mr. Z. took place on Monday, May 17, 2004. As with the first visit, we began with a lengthy discussion of Mr. Z.'s practice. We spoke of the preliminary trial, and an OZ member asked Mr. Z. if he had devoted any thought to that experience during the past 6 months. His answer was immediate and direct: every single day. We described once more the final protocol in detail. A total of 100 attempts would be undertaken. The number of successful "hits" by Mr. Z. would have to exceed 65 in order to be deemed statistically significant. Our claimant confirmed that, more than ever, he desired to participate in the test and eventually see the results published. A release authorizing us to implement the experimental protocol was executed (see exhibits), before coming to the heart of the matter.

a. Choice of participants

- The protocol required the presence of a test subject referred to hereinafter as the "subject". This person would be selected by Mr. Z. on the basis of the quality of the signal he or she emitted. Each of the 7 OZ members participated in Mr. Z.'s tests and he ultimately designated "Miss C."
- He next selected his two examiners. As these persons would be responsible for noting what Mr. Z. would tell them during the test, "Mr. A" and "Mr. B" were chosen for the weakness of their signals: Mr. Z. wished to avoid any interference that might detract from the quality of his perception.

- As Mr. Z. expressed no preference regarding the choice of the person who would assist the subject, a name was drawn at random. As luck would have it, "Mr. D." became Miss C.'s assistant.

b. Pre-drawing

- While the team selected to participate in the protocol prepared for the dry-run test, the three unoccupied members withdrew to an isolated area and came up with a random distribution the result of which was a series of ones and zeroes. In order to facilitate the analysis of the experimental results, it was arbitrarily decided that fifty "0"s and fifty "1"s would be used, such that the number of attempts would total 100. Mr. Z. was informed of these conditions before the protocol was implemented.



c. Dry run and implementation



- As Mr. Z. would be trying to determine the presence of Miss C. behind a folding screen, we began by testing the quality of the signal through it. Our subject thus took her place standing with her back to the folding screen, and Mr. Z., with a now-familiar movement of his hands, confirmed that he was receiving the signal clearly, without any alteration.
- An opaque cloth was added to the folding screen, in order to render it fully impermeable to light. The practitioner confirmed the presence of the fluid, still without alteration. Mr. Z. and his two examiners donned noise-attenuating ear muffs, which permitted them to be in a state of sound isolation, and we tested the signal once more without any problem.
- The subject and her assistant took their places in the room designated for them. The folding screen was moved into the frame of the door that served to close off that room.
- One of the three persons having participated in the random drawing handed an envelope to Mr. Z. and another envelope to Mr. D., the subject's assistant, each containing an identical copy of the results of the drawing. He then withdrew to a closed area.

- Mr. Z. placed the envelope in the back pocket of his trousers and isolated himself with his two examiners in a room partitioned from the test room by a wall. Mr. D., the subject's assistant, unsealed his envelope: the experiment could begin.

d. Experiment

- Examiner "B" knocked once on the wall separating Mr. Z and his team from the subject and her assistant. He then timed 10 seconds, the length of time necessary for the subject to assume her position.



- As soon as he heard the signal, the assistant, Mr. D., gestured to the subject, Miss C., whether she should place herself against the folding screen or not. A thumbs-up corresponded to a "1" on the pre-drawn sheet and meant that Miss C. took her place against the folding screen. A zero formed by the thumb and index finger corresponded to a "0" on the sheet and meant that Miss C. would stand at a distance of greater than one meter from the folding screen. On a separate sheet of paper, Miss C. would note what had been indicated to her before taking up position, for the purpose of subsequent verification (see diagram "Step 1").

- Mr. Z and his two examiners moved to a position in front of the folding screen. No limitation was placed on the time granted to Mr. Z. to test the presence of the

signal. When he deemed that he had been able to determine the presence or absence of the subject, Mr. Z. returned to his room followed by Mr. A and Mr. B. (see diagram "Step 2").

- Mr. B knocked once more on the wall, which triggered the next positioning. The practitioner indicated with a gesture (thumbs-up = 1 = presence; zero-with-thumb-and-index-finger = 0 = absence) what he was able to determine. Each examiner independently noted what had been indicated (see diagram "Step 3").
- Steps 2 and 3 were repeated until one hundred attempts were obtained.

e. Verification of data

- First, it was verified that the pre-drawn sheet held by the assisted corresponded to the positions noted by the subject. In this protocol, two tries were invalidated (see sheets 1 and 5).
- Next, it was verified that there was no discrepancy between the notes recorded by the two examiners (sheets 3 and 4).
- The claimant unsealed the envelope in his back pocket. It was then verified that the pre-drawing in his possession was the same as the one held by the assistant (sheets 2 and 1).

f. Analysis of results

- Conflicting results recorded on any of the sheets were stricken. In the implementation of this protocol, two trials were invalidated due to a conflict between the assistant's pre-drawn series and the indications marked by the subject.
- The results of the random drawing were compared to the indications noted by the two examiners (sheets 1-2 against sheets 3-4).
- **Number of valid attempts: 98.** The minimum number of "hits" required in order for the experiment to be considered a success (in scientific parlance, a statistically significant result) was recalculated on the following basis:

$N = 98$ (number of validated tests)

$p = 0,5$ (probability of success for each try)

The range in which more than 99% of attempts would fall is centered around $A = Np$ (average expected results) plus or minus a margin M expressed by the following formula:

$M = 3 \cdot \sqrt{N \cdot p \cdot (1-p)}$

N.B.: "sqrt" designates the square root

With $N = 98$ and $p = 0.5$, we obtain

$M = 14.85$

$A = 49$

The recalculated range is thus: $34.15 < 49 < 63.85$

Accordingly, we would expect a number of successful tries greater than or equal to 64 in order to speak of a statistically significant result in the context of this experiment.

- Final results:

Valid attempts : 98

Number of successful attempts : 55

Number of failed attempts : 43

The experiment did not yield a statistically significant result: failure.

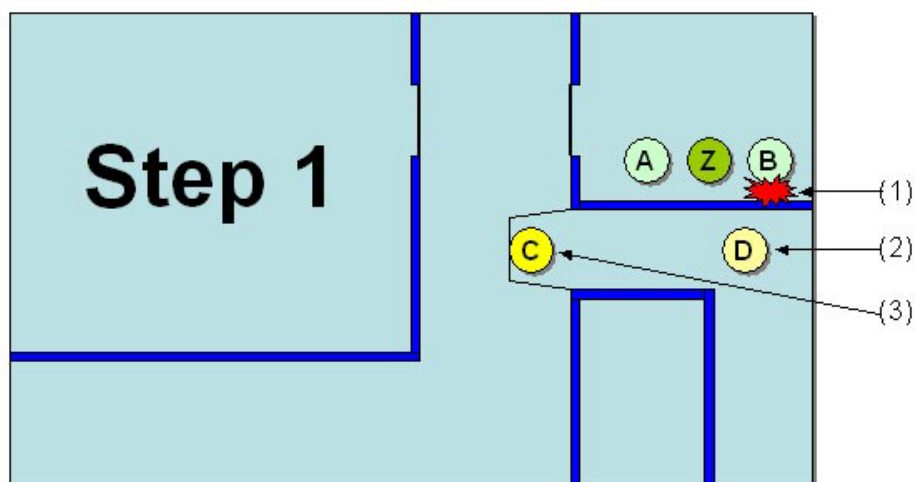
Conclusion

It took nearly one year, from initial contact to final protocol, for this experiment to reach fruition. Upon its conclusion, the satisfaction of having implemented a complete protocol is tinged with sadness. The protocol's results, however, can be added to a succession of experiments that, since the 18th century, have never yielded a positive result. Accordingly, we can hardly claim to be surprised. Nevertheless, Mr. Z. practices, seriously and with passion, an activity about which his patients seem to have no complaints. His surprise then, comes on top of disappointment. And since our relationship has been cordial, sincere and always marked by great mutual respect, we have great sympathy for him. When one considers the distances traversed, the hours spent sharing with us his practice and his personal understanding thereof, his firm desire to comprehend the true basis of his "perception", his perseverance despite a negative preliminary trial and the manifold doubts raised – in addition to his unfailing honesty – we are inclined to say that Mr. Z. truly has courage going for him.

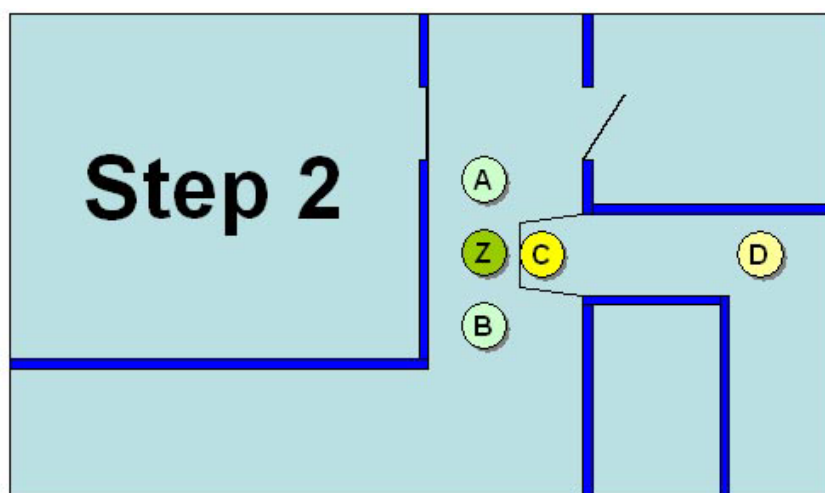
In an e-mail dated May 18, 2004, Professor Henri Broch of the University of Nice, the chief promoter of skeptical research in France, expresses a similar sentiment and writes: "Regarding your testing of the touch therapist, I feel sorry for him..."

Exhibits

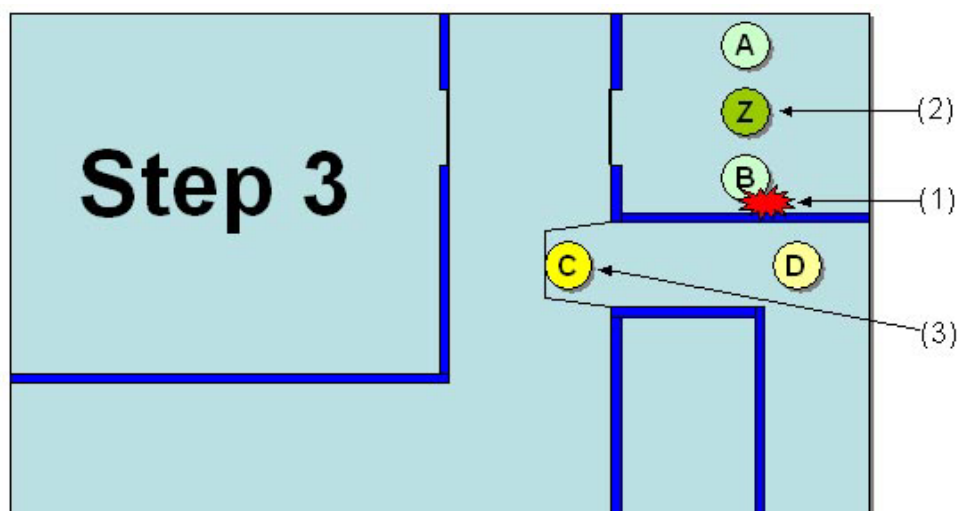
Protocol



- (1) Examiner "B" knocks once on the wall to indicate that the test team is ready, then he times 10 seconds.
- (2) Assistant "D" gestures to the subject "C" whether she should place herself against the folding screen or not.
- (3) The subject "C" notes what has been indicated to her before taking up position.



Mr "Z", followed by examiners, positions himself in front of the folding screen to test the presence of the signal.



- (1) Mr "Z" and his examiners Mr "A" et "B" return to their room. Examiner "B" knocks on the wall.
- (2) Mr "Z" indicates with a gesture what he was able to determine. Each examiner independently notes what has been indicated
- (3) In the mean time, the next positioning is set up.

Data

Pre-trace
AVANT EXP.

Observatoire Zététique
22, rue Bizanet
38000 - Grenoble
E-Mail: contact@observatoire-zetetique.org
Tel. président: 06 72 07 55 87

Date: 19/05/04 Lieu: Fontaine Expérience: Magnétisme

Nom: TÉMOIN NIVIVANT Signature: [Signature]

1ère dizaine	1	0	0	1	1	0	1	0	0	1
2ème dizaine	0	1	1	1	0	1	0	0	0	1
3ème dizaine	1	1	0	1	0	1	0	0	0	0
4ème dizaine	1	1	1	1	0	1	0	0	0	0
5ème dizaine	1	1	0	0	0	0	1	1	1	0
6ème dizaine	1	1	1	1	1	0	1	1	1	1
7ème dizaine	0	1	0	0	0	1	1	1	1	1
8ème dizaine	0	0	0	1	0	1	0	1	1	0
9ème dizaine	0	1	1	1	1	0	1	0	0	0
10ème dizaine	0	0	0	0	1	1	0	0	1	0

Remarques:

Sheet 1

EMETTEUR

Observatoire Zététique
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Tel. président: 06 72 07 55 87

Date: 19/05/2004 Lieu: Fontaine Expérience:

Nom: FABRE Géraldine Signature: [Signature]

1ère dizaine	1	0	0	1	1	0	1	0	0	1
2ème dizaine	0	1	1	1	0	1	0	0	0	1
3ème dizaine	1	1	0	1	0	1	0	0	0	0
4ème dizaine	1	1	1	1	0	1	0	0	0	0
5ème dizaine	1	1	0	0	0	0	1	1	1	0
6ème dizaine	1	1	1	1	1	0	1	1	1	1
7ème dizaine	0	1	0	0	0	1	1	1	1	1
8ème dizaine	0	0	0	1	0	1	0	1	1	0
9ème dizaine	0	1	1	1	1	0	1	0	0	0
10ème dizaine	0	0	0	0	1	1	0	0	1	0

Remarques:

Sheet 5

Résultats Assesseur N°2

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E-Mail: contact@observatoire-zetetique.org
Tel: président: 06.72.07.55.67

Date: 17.05.2004 Lieu: Fontaine Expérience: Magnétique

Nom: Monvoisin Richard Signature:

1ère dizaine	1	0	1	0	1	0	0	1	1
2ème dizaine	1	0	1	0	1	0	0	1	0
3ème dizaine	0	1	1	0	0	1	1	1	0
4ème dizaine	1	1	0	0	1	0	0	0	1
5ème dizaine	0	0	0	1	0	1	0	1	0
6ème dizaine	0	1	1	0	0	1	1	1	1
7ème dizaine	0	0	0	0	0	1	1	0	1
8ème dizaine	0	0	1	0	0	1	0	1	0
9ème dizaine	0	1	0	0	0	0	0	1	0
10ème dizaine	0	0	0	0	1	0	0	0	1

Remarques: big cul 5+6 (amulettes 4 et 5)
Culage sur 3e (20g) s'agit d'un 10e point

Sheet 3

Résultats Assesseur N°1

Observatoire Zététique
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E-Mail: contact@observatoire-zetetique.org
Tel: président: 06.72.07.55.67

Date: 17.05.2004 Lieu: Fontaine Expérience: Magnétique

Nom: Rigout Emmanuel Signature:

1ère dizaine	1	0	1	0	1	0	0	1	1
2ème dizaine	1	0	1	0	1	0	0	1	1
3ème dizaine	0	1	1	0	0	1	1	1	0
4ème dizaine	1	1	0	0	1	0	0	0	1
5ème dizaine	0	0	0	1	0	1	0	1	1
6ème dizaine	0	1	1	0	0	1	1	1	1
7ème dizaine	0	0	0	0	0	1	1	0	1
8ème dizaine	0	0	1	0	0	1	0	1	0
9ème dizaine	0	1	0	0	0	0	0	1	0
10ème dizaine	0	0	0	0	1	0	0	0	1

Remarques:

Sheet 4

Pré-Tirage AVANT EXP.

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E-Mail: contact@observatoire-zetetique.org
Tel: président: 06.72.07.55.67

Date: 17.05.04 Lieu: Fontaine Expérience: Magnétique

Nom: Signature:

1ère dizaine	1	0	0	1	0	0	1	0	1
2ème dizaine	0	1	1	1	0	1	0	0	1
3ème dizaine	1	1	0	1	0	1	0	0	0
4ème dizaine	1	1	1	1	0	1	0	0	0
5ème dizaine	1	1	0	0	0	0	1	1	1
6ème dizaine	1	1	1	1	1	0	1	1	1
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8ème dizaine	0	0	0	1	0	1	0	1	1
9ème dizaine	0	1	1	1	1	0	1	0	0
10ème dizaine	0	0	0	0	1	1	0	0	1

Remarques:

Sheet 2

Pré-Tirage AVANT EXP.

Observatoire Zététique
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Tel: président: 06.72.07.55.67

Date: 17.05.04 Lieu: Fontaine Expérience: Magnétique

Nom: Témoin NIVIVANT Signature:

1ère dizaine	1	0	0	1	0	0	1	0	1
2ème dizaine	0	1	1	1	0	1	0	0	1
3ème dizaine	1	1	0	1	0	1	0	0	0
4ème dizaine	1	1	1	1	0	1	0	0	0
5ème dizaine	1	1	0	0	0	0	1	1	1
6ème dizaine	1	1	1	1	1	0	1	1	1
7ème dizaine	0	1	0	0	0	1	1	1	1
8ème dizaine	0	0	0	1	0	1	0	1	1
9ème dizaine	0	1	1	1	1	0	1	0	0
10ème dizaine	0	0	0	0	1	1	0	0	1

Remarques:

Sheet 1

Legal agreement/disclaimer



Observatoire Zététique
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Tél. président: 06.72.07.55.87

Date : 12.05.2004
Lieu : Fankine
Présents :
- M2 Nicolas Vivant
- M2 Richard Monvoisin
- M11 Geratoline Fabre
- M11 Christel Rouaboute
- M2 Florent Morvin
- M2 Benoit Duchet
- M2 Emmanuel Riquier
- M2

Déclaration de mise en place d'un protocole expérimental entre l'association « Observatoire Zététique » et M., aussi nommé « le prétendant » dans les paragraphes ci-dessous.

- 1) Le prétendant est d'accord que tous les documents (photos, films, écrits, enregistrements,...) résultant de l'épreuve pourront être utilisés par l'Observatoire Zététique. Le prétendant peut demander, avant l'expérimentation, que ses résultats ne soient publiés qu'anonymement.
- 2) Le prétendant dégage l'Observatoire Zététique, ses membres, et tout aide ou assistant physique ou moral de la démonstration, de toute responsabilité en cas de blessure, maladie, traumatisme psychique, accident, perte professionnelle ou financière, résultant de la démonstration.
- 3) Le prétendant devra assumer tous ses frais personnels (déplacements, hébergement,...) liés à la démonstration ainsi que les frais inhérents aux demandes qu'il pourrait faire de matériels, appareils ou matériaux très spécifiques ou inhérents aux déplacements et hébergements des expérimentateurs s'il demande que sa démonstration se fasse en un lieu spécifique.
- 4) Quelle que soit l'issue de sa démonstration, le prétendant s'engage à toujours en préciser le résultat concret lors de toute déclaration (sous quelque forme et sur quelque support que ce soit) publique ou privée concernant cette démonstration.
- 5) Tous les prétendants devront formaliser par écrit leur acceptation des règles générales décrites ci-dessus avant qu'aucun détail de protocole expérimental ne soit élaboré. "

Signatures, précédées de la mention « lu et approuvé » :

Pour l'Observatoire Zététique,
lu et approuvé
Le Président de l'OZ
Emmanuel Riquier

Le prétendant,
lu et approuvé



Observatoire Zététique
22, rue Bizanet
38000 – Grenoble
E-Mail: contact@observatoire-zetetique.org
Tél. président: 06.72.07.55.87

Date : .../.../.....

Place :

In the presence of:

-
-
-
-
-
-
-

Declaration of implementation of experimental protocol between the Observatoire Zététique and Mr. Z, hereinafter also referred to as the “claimant”.

- 1) The claimant agrees that all documents (photographs, film, writings, recordings, etc.) resulting from the experiment may be used by the Observatoire Zététique. The claimant may request, prior to the experiment, that his anonymity be preserved in the published results.
- 2) The claimant releases the Observatoire Zététique, its members, and any person or entity participating in the demonstration from any liability in the event of bodily injury, illness, mental or emotional injury, accident, or financial or professional loss arising from the demonstration.
- 3) The claimant shall bear all his personal costs (travel, lodging, etc.) in connection with the demonstration as well as costs arising from requests he may make for equipment and materials and from the travel and lodging of the experimenters if the claimant requests that the demonstration take place at a specific location.
- 4) Regardless of the outcome of the demonstration, the claimant undertakes to represent truthfully the specific results thereof in any public or private statement (in any form or medium whatsoever) concerning such demonstration.
- 5) All claimants must formalize in writing their acceptance of the aforementioned general rules before any part of the experimental protocol is elaborated.

Signatures, preceded by the handwritten notation “read and approved”:

For the Observatoire Zététique,

The claimant,

Photographs



The subject (Miss "C".)



Her assistant (Mr "D".)



Messrs. "A" and "B" (examiners) and Mr. "Z" (claimant)



Looking for the fluid...



Related information:

The OZ has also published the following two papers (in French) on the subject of therapeutic touch:

<http://www.observatoire-zetetique.org/page/dossier.php?ecrit=3&ecritId=11>

<http://www.observatoire-zetetique.org/page/dossier.php?ecrit=3&ecritId=12>

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