# The Importance of Veridical Perceptions in Near-Death Experiences

Robert G. Mays, BSc Suzanne B. Mays, CMP www.selfconsciousmind.com

2015 IANDS Conference, San Antonio, Texas September 3, 2015

## What's going on in NDEs?

- Striking phenomenological aspects of NDEs
  - Hyperreal perceptions
  - Locus of perception is outside the physical body
  - Apparently non-physical veridical perceptions (AVPs) accurate, verified perceptions of physical environment
  - Indelible memories of the experience
  - Frequently when brain function is compromised (coma, cardiac arrest)
- Two opposing explanatory hypotheses:
  - The brain is producing these effects
  - Consciousness or mind has separated from the body

# What's going on in NDEs?

- Striking phenomenological aspects of NDEs
  - Hyperreal perceptions
  - Locus of perception is outside the physical body
  - Apparently non-physical veridical perceptions (AVPs) accurate, verified perceptions of physical environment
  - Indelible memories of the experience
  - Frequently when brain function is compromised (cardiac arrest, coma)
- Two opposing explanatory hypotheses:
  - The brain is producing these effects
  - Consciousness or mind has separated from the body



John Fischer

- John M. Fischer (Project Leader, Immortality Project)
  - "Any complete explanation of NDEs must account for all aspects of all NDEs"
  - Mitchell-Yellin, B., & Fischer, J. M. (2014). The near-death experience argument against physicalism: A critique. *Journal of Consciousness Studies*, 21 (7–8), 158–183.

# **Investigating NDE Veridical Perceptions**

- Michael Sabom with Sarah Kreutziger (1982)
  - Prospective study: no targets; analyzed NDE accounts against medical records; evaluated recollection of resuscitation events versus controls



Michael Sabom

- Jan Holden
  - Proposed "double blind" visual targets near the ceiling in hospital rooms, dynamically generated (1988)
  - Study of AVP cases: 92% completely accurate, 6% minor errors (2009)



Jan Holder

- Sabom, M. B. (1982). Recollections of death: A medical investigation. New York: Harper and Row.
- Holden, J. M. (1988). Rationale and considerations for proposed near-death research in the hospital setting. *Journal of Near-Death Studies*, 7(1), 19–31.
- Holden, J. M. (2009). Veridical perception in near-death experiences. In J. M. Holden, B. Greyson & D. James (Eds.), *The Handbook of Near-Death Experiences: Thirty years of investigation* (pp. 185–211). Santa Barbara, CA: Praeger/ABC-CLIO.

# **Investigating NDE Veridical Perceptions ...**

- Prospective studies with targets
  - 1990 2008: five separate studies (see Holden, 2009)
    - Only a few NDEs, one NDE with AVPs, no reports of seeing the target
  - Penny Sartori (2008)
    - Evaluated recollection of resuscitation events vs. controls
    - Compared hallucinations versus NDE perceptions (large differences)



Penny

• AWARE (AWAreness during REsuscitation) study (Parnia et al., 2014): after 4 years, one NDE with AVPs, no target in room



Sam Parnia

- Holden, J. M. (2009). Veridical perception in near-death experiences. In J. M. Holden, B. Greyson & D. James (Eds.), *The Handbook of Near-Death Experiences: Thirty years of investigation* (pp. 185–211). Santa Barbara, CA: Praeger/ABC-CLIO.
- Sartori, P. (2008). The Near-Death Experiences of Hospitalized Intensive Care Patients: A Five Year Clinical Study. Lewiston, NY: The Edwin Mellen Press..
- Parnia, S., Spearpoint, K., de Vos, G., Fenwick, P., Goldberg, D., Yang, J., ... & Schoenfeld, E. R. (2014). AWARE—AWAreness during REsuscitation—A prospective study. *Resuscitation*, 85 (12), 1799–1805.

# **Investigating NDE Veridical Perceptions ...**

- Cardiac arrest (CA) is assumed the best "model" of NDEs
  - Most closely resembles actual death
  - No blood flow to brain results in complete shutdown of all brain activity
  - Any veridical perceptions during CA imply perceptions without physical senses
  - Hyperreal perceptions and indelible memories require robust brain function
- 1990 analysis: NDEs occurring closer to death have more features
- But cardiac arrest is also problematic
  - Very few survivors; fewer who can be interviewed and followed up
  - Observed lower incidence of NDEs in CA
  - Memory deficits in CA survivors

<sup>•</sup> Owens, J. E., Cook, E. W., & Stevenson, I. (1990). Features of "near-death experience" in relation to whether or not patients were near death. *The Lancet*, 336, 1175–1177.

# Moving the study of AVPs forward

- New news
  - New analysis of NDEs in coma cases versus non-life-threatening cases
  - New analysis of the quality of memories in NDEs
- A fresh look at AVPs
  - Compilation of AVPs with independent, third-party verification
  - What does it take to establish the timing and locus of perception?
  - Are neurological explanations actually viable?
- Are NDEs objectively real?
  - NDEs with multiple witnesses; shared NDEs
  - Apparitional NDEs
- Future of AVP investigation
  - What will it take for eventual acceptance of the separate-mind hypothesis

#### A radical new view of NDEs

- Vanessa Charland-Verville, Steven Laureys and colleagues (2014)
   from University of Liège in Belgium
- Compared 140 NDEs from coma versus 50 NDEs from non-lifethreatening events (sleep, fainting, meditation, alcohol use, etc.)
- <u>No difference</u> in the *intensity* (NDE scale) and *content* (NDE elements) between non-life-threatening NDEs and coma NDEs



Vanessa Charland-Verville



**Steven Laureys** 

• Charland-Verville, V., Jourdan, J.-P., Thonnard, M., Ledoux, D., Donneau, A.-F., Quertemont, E., & Laureys, S. (2014). Near-death experiences in non-life-threatening events and coma of different etiologies. *Frontiers in Human Neuroscience*, 8(203).

#### A radical new view of NDEs

- Vanessa Charland-Verville, Steven Laureys and colleagues (2014)
   from University of Liège in Belgium
- Compared 140 NDEs from coma versus 50 NDEs from non-lifethreatening events (sleep, fainting, meditation, alcohol use, etc.)
- <u>No difference</u> in the *intensity* (NDE scale) and *content* (NDE elements) between non-life-threatening NDEs and coma NDEs
- "Closeness to death" and physiological or psychological factors are not determinative in NDEs (our conclusion)
  - NDEs involve a common state of consciousness
  - Many triggers but a <u>single common "proximate cause"</u>: the separation of consciousness from the physical body
  - Requirement of cardiac arrest or zero brain electrical activity is irrelevant to the NDE itself



Vanessa Charland-Verville



**Steven Laureys** 

• Mays, R. G., & Mays, S. B. (2015). Explaining Near-Death Experiences: Physical or non-physical causation?, in review *Journal of Near-Death Studies*.

#### **Memories of NDEs**

- Marie Thonnard, Steven Laureys and colleagues (2013) from University of Liège in Belgium
- Compared the memories of NDEs with memories of others who were in coma without an NDE
  - Significantly more characteristics: visual details, memory clarity, memories of being involved in the event & emotional content



**Marie Thonnard** 



**Steven Laureys** 

• Thonnard, M., Charland-Verville, V., Brédart, S., Dehon, H., Ledoux, D., Laureys, S., & Vanhaudenhuyse, A. (2013) Characteristics of near-death experiences memories as compared to real and imagined events memories. *PLoS ONE 8*(3): e57620.

#### **Memories of NDEs**

- Marie Thonnard, Steven Laureys and colleagues (2013) from University of Liège in Belgium
- Compared the memories of NDEs with memories of others who were in coma without an NDE
  - Significantly more characteristics: visual details, memory clarity, memories of being involved in the event & emotional content
- NDEs can't be considered as imagined events; NDE events are really perceived
  - Contradicts skeptics' assertions: NDEs are dream-like memories or are altered memories of real events
  - NDEr remembers being actively involved in the event
  - "What makes the NDEs 'unique' is the perception of the experience itself"



**Marie Thonnard** 



**Steven Laureys** 

• Thonnard, M., Charland-Verville, V., Brédart, S., Dehon, H., Ledoux, D., Laureys, S., & Vanhaudenhuyse, A. (2013) Characteristics of near-death experiences memories as compared to real and imagined events memories. *PLoS ONE 8*(3): e57620.

## **Dutch book on paranormal aspects of NDEs**

An important book published in Dutch in 2013 by NDE researchers Titus Rivas, Anny Dirven and Rudolf Smit

Summarized 78 verified cases of veridical perceptions and other paranormal events in NDEs



- Only cases with <u>independent third-party corroboration</u> have been included
- IANDS is translating and will publish this book in English; the authors are adding several additional recent cases
- Working title The Self Does Not Die
- Jan Holden is the editor; Robert and Suzanne Mays will write the foreword to this
  edition
- IANDS is still asking for donations to complete the publication and to publicize the book: <a href="https://www.iands.org/translate">www.iands.org/translate</a>
- Rivas, T., Dirven, A., & Smit, R. H. (2013). Wat een stervend brein niet kan: aanwijzingen voor parapsychologische verschijnselen rond bijnadoodervaringen; de harde kern van bevestigde casussen. Leeuwarden, Netherlands: Elikser B.V. Publishing.

## Dutch book on paranormal aspects of NDEs ...

- Types of AVPs
  - AVPs occurring in the immediate environment (10 cases).
    - Al Sullivan
  - AVPs of events or objects beyond the reach of physical senses (14 cases).
    - Maria's shoe
    - 1985 quarter
    - 12-digit serial number
  - AVPs during cardiac arrest (30 cases).
    - Lloyd W. Rudy's patient
    - Laurin Bellg's patient Howard







Lloyd Rudy

- Rivas, T. & Smit, R. H. (2013). A Near-Death Experience with Veridical Perception Described by a Famous Heart Surgeon and Confirmed by his Assistant Surgeon. *Journal of Near-Death Studies*, 31(3), 179–186. YouTube video: https://www.youtube.com/watch?v=JLioDuvQRo8
- Bellg, L. (2015). Near Death in the ICU. Appleton, WI: Sloan Press.

## **Dutch book on paranormal aspects of NDEs ...**

- Other paranormal aspects of NDEs
  - Telepathic communication with a living person (4 cases).
    - Example: George Rodonaia
  - Communication with unknown deceased persons (5 cases).
    - Example: Colton Burpo
  - Deceased loved ones give paranormal information (5 cases).
    - Example: Eddie Cuomo
  - NDEr appears as an apparition to others (5 cases).
    - Examples: Mary Gosse, Olga Gearhardt, Laurin Bellg's cancer patient
  - Psychic abilities after an NDE (3 cases).
    - Example: Cherylee Black
  - Miraculous healings after an NDE (9 cases).
    - Example: Anita Moorjani

## Establishing the timing and locus of perception

- Unusual objects that are not physically possible for NDEr to see
  - Objects not familiar to NDEr
  - Objects unfamiliar to anyone else immediately present
  - Objects impossible for anyone immediately present to see
  - Objects at a large distance
  - Hidden targets near the ceiling

## Establishing the timing and locus of perception

- Unusual objects that are not physically possible for NDEr to see
  - Objects not familiar to NDEr
  - Objects unfamiliar to anyone else immediately present
  - Objects impossible for anyone immediately present to see
  - Objects at a large distance
  - Hidden targets near the ceiling
- Unusual events that are not physically possible for NDEr to observe
  - Sequence and details of the unfolding event
  - Time of the event relative to the NDEr's physiological condition
  - Event occurring in the presence of the NDEr but out of physical sensation
  - Event occurring beyond the NDEr's physical presence
  - Hidden targets: random compositions of elements, changing over time

## Establishing the timing and locus of perception

- Unusual objects that are not physically possible for NDEr to see
  - Objects not familiar to NDEr
  - Objects unfamiliar to anyone else immediately present
  - Objects impossible for anyone immediately present to see
  - Objects at a large distance
  - Hidden targets near the ceiling
- Unusual events that are not physically possible for NDEr to observe
  - Sequence and details of the unfolding event
  - Time of the event relative to the NDEr's physiological condition
  - Event occurring in the presence of the NDEr but out of physical sensation
  - Event occurring beyond the NDEr's physical presence
  - Hidden targets that are randomly composed and changed over time
- Best cases
  - Detailed, purely visual event or unusual object, perceived at a distance or with physical vision blocked
  - Contemporaneous with a known physiological condition of electrical flat line
  - Immediate verification by independent investigators

#### Are neurological explanations viable?

- No physiological explanation fits all cases, especially near-death-like cases (NDLEs)
  - Hypoxia, hypercarbia, administered drugs, etc.
  - Endogenous neurochemical factors: endorphins, DMT, etc.
  - Temporal lobe seizure, REM intrusion, etc.
- The subjective experiences of these physiological conditions are not like NDEs
  - Cases where the person has experienced both, e.g. hypoxic G-LOC and an NDE

• Greyson, B., Kelly, E. W. & Kelly, E. F. (2009). Explanatory models for near-death experiences. In J. M. Holden, B. Greyson & D. James (Eds.), *The Handbook of Near-Death Experiences: Thirty years of investigation* (pp. 213-234). Praeger Publishers.

## Are neurological explanations viable?

- No physiological explanation fits all cases, especially near-death-like cases (NDLEs)
  - Hypoxia, hypercarbia, administered drugs, etc.
  - Endogenous neurochemical factors: endorphins, DMT, etc.
  - Temporal lobe seizure, REM intrusion, etc.
- The subjective experiences of these physiological conditions are not like NDEs
  - Cases where the person has experienced both, e.g. hypoxic G-LOC and an NDE
- No correlation of NDEs with physiological factors
  - Many NDEs occur with no hypoxic condition
  - Many people near death with hypoxia do not report an NDE
  - If hypoxia were the cause of NDEs there would be a strong correlation
  - Same case for all other physiological explanations
  - → A common <u>proximate</u> cause for NDEs is likely

#### Are neurological explanations viable?

- No physiological explanation fits all cases, especially near-death-like cases (NDLEs)
  - Hypoxia, hypercarbia, administered drugs, etc.
  - Endogenous neurochemical factors: endorphins, DMT, etc.
  - Temporal lobe seizure, REM intrusion, etc.
- The subjective experiences of these physiological conditions are not like NDEs
  - Cases where the person has experienced both, e.g. hypoxic G-LOC and an NDE
- No correlation of NDEs with physiological factors
  - Many NDEs occur with no hypoxic condition
  - Many people near death with hypoxia do not report an NDE
  - If hypoxia were the cause of NDEs there would be a strong correlation
  - Same case for all other physiological explanations
  - → A common <u>proximate</u> cause for NDEs is likely
- Consciousness is associated with a sustained level of cortical electrical power
- Neurological explanations of accurate conscious perceptions of events at a distance during an NDE are a stretch

## Are there objective validations of NDEs?

- Simultaneous "group NDEs"
  - Accounts consistent among the NDErs
  - Example: Jake and the Hotshots (Gibson, 1999)
- "Shared NDE"
  - Healthy person observes the process of the NDE, account matches the NDEr's subjective experience
  - Similar to shared-death experience "SDE" (Moody & Perry, 2010; Fenwick & Fenwick, 2008)
  - Example: Jan Price (1996)
  - Gibson, A. S. (1999). Fingerprints of God: Evidences from near-death studies, scientific research on creation, and Mormon theology. Bountiful, UT: Horizon.
  - Moody, Jr., R. A., & Perry, P. (2010). Glimpses of Eternity: Sharing a loved one's passage from this life into the next. New York: Guideposts.
  - Fenwick, P., & Fenwick, E. (2008). The Art of Dying: A journey to elsewhere. (chapter 9). New York: Continuum.
  - Price, J. (1996). The Other Side of Death. New York: Fawcett Columbine.

## Is there any objective validation of NDEs ...

- "Apparitional NDEs"
  - NDEr visits another person out-of-body, communicates and both accounts are verified as consistent
  - Examples:
    - Mary Gosse (Alvarado, 2010)
    - Olga Gearhardt (Morse & Perry, 1994)
    - Laurin Bellg's cancer patient (Bellg, 2014)

- Alvarado, C. S. (2010). "The Dying Mother:" Historical citations of Mary Goffe's seventeenth-century near-death apparition. *Journal of Near-Death Studies*, 29(1), 241–253.
- Morse, M., & Perry, P. (1994). Parting Visions: Uses and meanings of pre-death, psychic, and spiritual experiences. New York: Villard Books.
- Bellg, L. (2014). Patient NDEs in the ICU. 2014 TMI Professional Seminar, The Monroe Institute, Faber, Virginia. https://www.youtube.com/watch?v=xdScjvc14xE

## Is there any objective validation of NDEs ...

- "Apparitional NDEs"
  - NDEr visits another person out-of-body, communicates and both accounts are verified as consistent
  - Examples:
    - Mary Gosse (Alvarado, 2010)
    - Olga Gearhardt (Morse & Perry, 1994)
    - Laurin Bellg's cancer patient (Bellg, 2014)
- Objective perception and corroboration of the subjective NDE content
  - Confirm the objective existence of the mind or spirit of the NDEr
  - Especially if:
    - Corroborated as occurring at same time
    - Observed details match
    - Information is communicated or NDEr's presence made known

## The future of AVP investigation

- AWARE study limitations
  - Projections for producing statistically meaningful results several decades
  - Controlled experimental study is impractical because conditions can't be fully controlled not necessary for a "scientific" study
  - Cardiac arrest is too restrictive, too long to get results
  - Compare with broader in-hospital phenomenological studies (e.g. Sabom, Sartori, Bellg)

## The future of AVP investigation

- AWARE study limitations
  - Projections for producing statistically meaningful results several decades
  - Controlled experimental study is impractical because conditions can't be fully controlled not necessary for a "scientific" study
  - Cardiac arrest is too restrictive, too long to get results
  - Compare with broader in-hospital phenomenological studies (e.g. Sabom, Sartori, Bellg)
- Proposal: a single-hospital investigation of all cases likely to have resulted in an NDE
  - In conjunction with a graduate program
  - <u>All</u> rooms in hospital equipped with visual targets, preferably driven by computers
  - Interview all possible cases and document any unusual events
  - Verify and document all details in depth as soon as reported (Mays & Mays, 2009)
  - Targets are more likely ultimately to be seen
  - Mays, R. G. & Mays, S. B. (2009). On the scope of analysis for the AWARE study. Journal of Near-Death Studies, 27 (3), 195-201.

## **Eventual acceptance of the mind-entity model**

- AVPs are the critical first step to establish the fact of mind separation
  - Only reasonable explanation for veridical perceptions
  - NDEs occurring in widely varied circumstances imply a common proximate cause
  - Only reasonable explanation applying to "all aspects of all NDEs"
  - Weight of the evidence and the wide variety of cases

#### Eventual acceptance of the mind-entity model

- AVPs are the critical first step to establish the fact of mind separation
  - Only reasonable explanation for veridical perceptions
  - NDEs occurring in widely varied circumstances imply a common proximate cause
  - Only reasonable explanation applying to "all aspects of all NDEs"
  - Weight of the evidence and the wide variety of cases
- Identify the neurological interface between the mind and the brain
  - Already there is broad explanatory power for several "enigmas" of consciousness
  - There should also be significant explanatory power for specific neurological problems
- With both steps there will be eventual acceptance