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SPEAKING OF LOVE: AN INTERVIEW WITH JIM LYNCH Part II

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Part I of this interview dealt with how Jim Lynch came to Horsley Gantt's laboratory in 1962 because it was the only facility with an opening close enough to make it financially feasible for him to visit his fiancée in Boston on weekends. Gantt, who was to become his mentor for the next two decades, had studied with the renowned Ivan Pavlov in Russia from 1922 to 1929, when he returned to The Johns Hopkins Medical School to establish his Pavlovian Laboratory. His subsequent demonstration of the profound influence human contact had on cardiovascular responses in laboratory animals made an indelible impression on Jim, as did the Pavlovian Society that Gantt had established at Johns Hopkins in 1955. The purpose of this society was to foster an integrative approach that would promote interdisciplinary scientific communication between basic science researchers and clinicians or other health care practitioners. This allowed Jim to meet distinguished physicians, psychologists, and others who also made a lasting impression on him, including Stewart Wolf, B. F. Skinner and John Dos Passos.

It was Gantt's continued and very strong support that also facilitated Jim's ability to subsequently obtain his faculty positions at the Johns Hopkins Medical School, the University of Pennsylvania Medical School, and finally, as Professor and Director of the Psychophysiology Clinic at the University of Maryland School of Medicine. Here, Jim extended Gantt's the "Effect of Person", by studying how personal contact could influence the health of coronary care unit patients.

ALSO INCLUDED IN THIS ISSUE

- **Type A's, Schizophrenics, Pets And Blood Pressure**
- **Educational Failure And Premature Death**
- **Speaking About Love - From "No Place" To "No-Body"**
- **Descartes & Darwin On Trial**

Subsequent research on how human relationships influenced cardiovascular health led to his 1978 best seller *The Broken Heart: The Medical Consequence of Loneliness*. This remarkable treatise attracted widespread media attention here and abroad and Jim's life began to change dramatically. Shortly after it was published, he saw a demonstration of a new computerized device that could non-invasively monitor and record heart

rate, systolic and diastolic blood pressure and mean arterial pressure on a minute-to-minute basis. Since it was more accurate and convenient than the conventional auscultatory method using a stethoscope it significantly facilitated and enhanced his ability to evaluate the effect of emotions and personal interactions on blood pressure and heart rate. One of the first observations he made was the prompt and impressive rise in blood pressure that occurred as soon as anyone started to speak. The higher the resting blood pressure, the greater the surges while talking. Although these were sometimes alarming, especially in hypertensives, patients were completely unaware of whether their blood pressures were low, normal or dangerously high.

Subsequent studies showed that blood pressure surges while talking were influenced by numerous other factors and his research efforts concentrated on identifying the mechanisms responsible for these varied effects and how this information could be utilized to help his patients. Due to space constraints, we were unable to discuss how this research resulted in the publication of *The Language of the Heart* and later *A Cry Unheard*, much less his forthcoming *Speaking of Love*. In Part 2 of this interview, we will trace the progressive evolution of his exploration of the physiological effects and medical consequences of human interrelationships that I believe can be illustrated in an orderly fashion by each of these books.

PJR: We are up to the time when I joined in your research by using the Dinamap device in my own practice and was initially similarly skeptical about its accuracy because of the dramatic but silent surges in blood pressure when patients started to speak. I was also able to confirm your findings about various factors that influenced these spikes. Perhaps you could comment further on these research studies and how they led to the publication in 1983 of *The Language of The Heart: The Body's Response to Human Dialogue*.

JJL: The subtitle noted above was actually added by Martin Kessler and was published without my ever having seen it, since I had complete confidence in his judgment. Martin was an excellent editor, president of Basic Books and a marvelous man whom I greatly admired. However, I was startled when I saw this subtitle that presumably described what the book was about. The central theme of *The Language of The Heart* was to attack Descartes' mind/body split but I felt that this subtitle appeared to support it. **The human heart does not respond to dialogue, it is inextricably involved in this as well as all other forms of communication with others.** It was unsettling to realize that someone with Martin's keen intellect had not recognized this important distinction and I realized that I would face an uphill battle in trying to get the public to grasp this critical if not crucial issue. When I voiced my concerns to Martin he graciously agreed to change the paperback subtitle to "*The Human Body in Dialogue*", which was precisely what this book was all about. This Cartesian separation and disassociation between mind and body — the extraction of human speech from the body, as if talking were solely an attribute of an amorphous mind/soul — still dominates clinical medicine, and is a problem I frequently face when treating cardiac patients.

Although stress management is mandated by the American Heart Association, most cardiac patients are understandably uneasy about seeing a "shrink" for problems they uncritically assume to be linked to genetic predisposition, diabetes, diet, smoking, cholesterol and lack of exercise. Without the support of cardiologists, like Jeffrey Quartner, director of a large cardiac rehabilitation program in Baltimore, most patients with coronary disease would be reluctant to enter a program designed to help them reduce or manage stress. I often see these patients shortly after they have finished exercising, which they understand helps to improve the function of their "heart pump" as part of their overall rehabilitation program. Most had also undergone coronary bypass, the insertion of stents or angioplasty. These again are primarily plumbing procedures to promote the pump's power by physically overcoming obstructions to blood flow. The whole medical metaphor is that their hearts are merely pumping machines

with problems that can only be corrected by some mechanical means. Therefore, when I first meet these patients I ask them **"Do you think that you and your heart pump are two separate entities? What other pump not only talks, but wants to be understood?"** They often smiled when I asked if they believed that they and their bodies are two separate entities or if they rented their bodies from Hertz or Avis. I would then show them graphs vividly demonstrating that virtually all cardiac rehabilitation patients exhibit far greater rises in blood pressure when they talk than during maximal treadmill exercising. In addition, these impressive increases occur despite the fact that they are often on as many as six different drugs designed to reduce their blood pressure and regulate their heart rate.

In addition to studies with cardiac rehabilitation patients, we carried out a large number of psychosocial and interpersonal investigations in an effort to further define the nature of the varied links and factors that influenced blood pressure surges while speaking. We showed that pressure rises as soon as people begin to talk at all ages. We further documented a linear correlation between the degrees of these blood pressure surges with advancing age. The elderly showed particularly high increases, probably due in part to progressive atherosclerosis and loss of plasticity in their peripheral arteries. These observations helped to explain why many clinicians suggested that senior citizens have a daily cocktail or glass or two of wine, since the vasodilating effects of alcohol could contribute to their cardiovascular health, especially when talking.

Type A Behavior Pattern, Schizophrenia, Pets And Blood Pressure

Other studies demonstrated that the rate and volume of speech were clearly correlated with the magnitude of pressure increases. Rapid, forceful speech triggered far greater rises when compared to speaking the same words in a slower, softer and more relaxed manner. These observations were particularly intriguing because Rosenman and Friedman had shown that Type A Personalities were far more prone to develop coronary heart disease than Type B's. **The defining characteristic of Type A behavior is an individual's vocal stylistics and speech patterns.** While Type A's exhibit exaggerated cardiovascular responses to stress, the magnitude of these increases in systolic and diastolic pressures are not adequately appreciated when blood pressure is measured using a stethoscope, since this requires silence from both doctor and patient during the procedure. Sustained hypertension can lead to coronary disease but this is not a Type A characteristic. I am quite confident that in the near future, the bridging mechanisms explaining the linkages between Type A and coronary heart disease will prove to be the repetitive spikes in blood pressure that damage the inner surface of coronary arteries when people speak in a rapid, forceful manner. As you and others have emphasized, this type of "plosive" speech is a typical Type A trait.

Friedman and Rosenman also suggested that Type A people were "poor listeners". They tended to think about what they were going to say next and frequently interrupted others who were talking to emphasize their own points. As we were able to show in dozens of studies, while pressure rises rapidly when a person begins to speak, it quickly drops below basal levels when listening to others. These typical Type A communicative characteristics not only produce proportionately greater increases in blood pressure while talking but blood pressures also fail to fall back to basal levels when they stop. That's because instead of listening to someone, they are constantly thinking of what to say next and/or when to interrupt the speaker to disagree or even agree with some statement. Thus, Type A's are caught in an upward spiral of increasing blood pressure surges the longer they continue to talk or try to communicate with others.

In addition to listening to others, blood pressure also falls when people silently attend to the living world outside the confines of their own skin. A good illustration of this can be found in the seminal research of Aaron Katcher, a psychiatrist at the University of Pennsylvania Medical School. After meeting him while on the Penn faculty, Aaron subsequently

collaborated in a number of our studies that linked talking and listening to major upward and downward shifts in blood pressure, a phenomenon we referred to as the "dialogical seesaw". Aaron greatly extended these observations by demonstrating that watching tropical fish swim in a tank could lower blood pressure more than meditation and did pioneering studies on the blood pressure reduction effects of tending to pets.

While continuing with a variety of basic research studies to assess other aspects of how communication affected health, we also initiated our first long-term investigation of factors determining the survival of heart patients after they were released from the coronary care unit. Tracking well over one hundred patients for extended periods, we monitored virtually every conceivable physiological, psychosocial, economic, and interpersonal variable that could possibly influence long-term survival. It was no surprise to find that the extent of ventricular damage was the strongest predictor of subsequent sudden death. We were not prepared, however, for what was **the second strongest predictor of long-term survival, which was whether or not the patient had a pet. Those without pets had a fourfold increase in mortality rates compared to patients with pets!**

We subsequently showed that the mere presence of a pet in a room with children had a dramatic effect on lowering their basal blood pressures and an equally powerful reduction in BP surges when these children read a book aloud to a pet. Much to my surprise, these studies attracted widespread media interest, including my participation in two different *60 Minutes* documentaries. It later led to the now popular practice of bringing pets into nursing homes and health care facilities. A number of other investigators subsequently confirmed that when children read to their dogs, they had far fewer problems than when reading to adults. We began to see a direct link between a child's perception of their self-worth (as assessed by perceived intelligence) and the magnitude of pressure increases when they read aloud. Black male children had by far the greatest increases in pressure, even though they were reading a book two grades below level and had no difficulty reading the book aloud. Some of these pressure increases were 2-3 standard deviations above the highest pressures recorded for children of that age and these were also significantly blunted by reading to a pet. Again, the hidden dimension of the links between status incongruity, factors influencing blood pressure surges when speaking, and academic achievement, would be demonstrated in a highly novel manner.

Aaron Katcher spearheaded all of our research on the role of animals in health and deserves the major credit for our findings. I was reminded of this when I was recently asked to give the keynote address for Intermountain Therapy Animals, a non-profit Utah group that has developed wonderful methods to bring dogs into schools to help children with serious learning problems. Founded in 1993 as The Good Shepherd Association, the name was changed in 1997 to more accurately reflect what it did. Learning-disabled children are taught to read to dogs instead of adults and the results have been so successful that there are now chapters throughout the U.S. and in several foreign countries. The establishment of this organization, as well as all of their approaches, is based to a large extent on our research findings. Along with the increasing practice of bringing pets into nursing homes, this is another highly gratifying development that sprang from our simple observations of the therapeutic benefits of pets on lowering blood pressure and its surges during communication. These findings would later play a crucial role in our ability to help patients lower their blood pressure and reduce its rise when speaking to others.

PJR: In that regard, your publications over two decades ago with Aaron Katcher, Erika Friedmann and others on the cardioprotective effects of pets and caring or tending to someone continue to be confirmed and extended by others. An article in the current (August) issue of *Stress and Health* reported that simply watching a silent videotape of fishes, birds and certain animals for 10 minutes significantly lowered heart rate and blood pressure when

compared to controls who were simply looking at a blank screen. I think it is also important to discuss the evidence that these marked blood pressure surges with speech, as well as sustained hypertension in many patients, represent disturbances or defects in communication. My recollection is that the only time we did not see these spikes was in schizophrenic patients, possibly because they could not or didn't care about communication with others. And it was not only speaking or the physical exertion associated with talking to someone since the same surges were seen in deaf mutes when they communicated with others by sign language but not when they moved their hands in a vigorous but meaningless fashion. Whom you were talking to, what you were saying, and the presence of a pet also had varied effects and perhaps you could comment on these observations and their significance.

JJL: I am glad you brought up our paradoxical findings in schizophrenics, which typically included a drop in blood pressure when they spoke. This led me to do an extensive review of the literature on blood pressure in schizophrenia that was also thoroughly discussed in *The Language of the Heart* along with Type A behavior, pet ownership and other topics covered in this Newsletter. Numerous studies had shown that schizophrenics tended to have lower blood pressures than other institutionalized patients and the population at large. The problem in evaluating this was that it included paranoid, hebephrenic and catatonic schizophrenics and this was further complicated by the advent of different antipsychotic medications with unknown effects. Nevertheless, it seemed clear that the more these patients were withdrawn the lower their pressures and that this was reversed when social contact was increased. I was able to confirm that schizophrenics participating in other well-controlled research studies actually lowered their blood pressure when they started to speak, whether or not they were on their antipsychotic medications. This effect was so impressively different, that in one psychiatric hospital where 20% of the patients were schizophrenic, I was able to blindly identify each one by their blood pressure speech responses although I had no knowledge of the diagnosis of any of the patients we tested. And I don't think that this lack of a blood pressure rise when talking is because schizophrenics "do not care." When they did engage in real dialogue, such as complaining about the hospital food, they had astounding hypertensive blood pressure surges. I have long suspected that schizophrenics are probably terrified when they do get back in touch with communicative reality. Paul, I suspect that someday this finding will have important therapeutic clinical ramifications, especially if we stop focusing solely on treatment with drugs and etiologies that are only neurological or genetic. The puzzling communicative problems characteristic of schizophrenia are a fertile field for future investigations that have the potential to provide important insights into the nature of this disorder that could lead to progress in developing safer and more effective treatment approaches.

Another intriguing discovery during the course of our research studies was that the perceived status of whom you were talking to determines the magnitude of pressure increases. If a person perceived that they were speaking to someone of much higher social status, then blood pressure always rose to a greater degree than if they thought they were talking to someone of lower status. This had major implications in several respects. Epidemiologically, **it helped to clarify why blacks tend to have higher average blood pressures than whites and why there is a direct and linear correlation between educational status and basal blood pressures.** Individuals with less education have higher resting blood pressures than high school and college graduates even when they have attained a similar degree of financial and social success. While most people perceive that Type A traits increase as you climb the corporate ladder, I was able to demonstrate in *A Cry Unheard* that there was also a direct and linear correlation between less education and increased Type A behavior. The reason for Type A inappropriate competitive behavior is a deep underlying sense of insecurity and self-esteem as you and Ray Rosenman explained in your 1997 Newsletter, "Social Support: The Supreme Stress Stopper" and I quoted this section on page 174 and 175 of *A Cry Unheard*. In a very real sense, those social/psychological forces that had led to a

lowering of self-esteem also resulted in marked blood pressure increases when these individuals tried to communicate with others. As you noted, we also showed that it was not simply speaking per se that led to blood pressure increases, but rather the act of communicating. We tested deaf individuals while signing and found that they had virtually identical pressure increases while they used sign language as people who used speech to communicate.

We began to assemble all of the information and knowledge gained from our research results in an attempt to develop a highly effective program that would help patients with cardiovascular and other psychophysiological vascular disorders like migraine and Raynaud's to manage and cope with their problems in a far more effective manner. Our growing appreciation of the powerful ways that communication could influence the autonomic or "involuntary" nervous system led us to hypothesize that, if people had "talked their way into" troublesome health disturbances, they could also be taught ways to listen and/or "talk themselves out" of these problems. I described how we were able to achieve this goal and devoted an Appendix to delineating this treatment process that we referred to as "Transactional Psychophysiology".

PJR: The Appendix also referenced a forthcoming book entitled *Transactional Psychophysiology: A New Non-Drug Treatment For Stress-Related Disorders* by you, me, Sue Thomas and Herb Gross that would expand on this, but that we never got around to completing. However, as you noted in some recent correspondence, "Talking was no longer conceived as a 'mental' but a 'biological' activity with infinite possibilities. A trillion cells speaking to another trillion cells was the real language of our hearts since blood pressure changes touched every cell in the human body. The 'language of the heart' was far more than poetic metaphor, just as the 'broken heart' was also an overwhelming medical reality." This reminded me that I had not treated readers to any of your writing, a problem recently faced when I was asked to write a Foreword to Stewart Wolf's autobiography. I solved this by providing an excerpt from one of his papers illustrating not only how well he wrote but how his broad cultural background had enabled him to gain important insights into the roots of his patients' problems. For the same reasons, I have appended below the last two paragraphs of *The Language of the Heart*, which I often revisit because they are so compelling and captivating.

Contained in the 'In Exitu' of the medieval Gregorian chant is the central drama of every human life. Lonely, haunting, ascetic, stark, this hymn recalls the exile of the Jews wandering in the wilderness of Sinai. It recalls the loneliness of a tribe in exile, the distress of having no place to live, the restless quest for a homeland, a promised land where one could live a life shared with others in Jerusalem. Throughout this book, patient after patient has recounted painful aspects of this human drama as each person, in exile from his or her own body, has sought relentlessly to find some home, some sense of place, some way of relating to others and an end to their engulfing isolation and loneliness. And, as these patients' suffering has made clear, to be unable to live in one's body is to have no place to live. It is a life of exile. To find one's home and to rediscover one's own body is to discover a life with others in the Jerusalem of the human heart.

At times I have found myself trembling when meeting the eyes of a patient -- looking at me, searching, hoping earnestly to discover for the first time the emotional meaning of his or her elevated blood pressure, rapid heart rate, or freezing hands. At such moments I have felt Schrödinger's reality -- deeply felt it -- for surely there is far more to their eyes than optical sensors whose only function is to detect light quanta. And I have trembled then precisely because I have caught a glimpse of the infinite universe behind those eyes and the reality of a universal Logos uniting us in dialogue. And it is at such moments, in the quiet sharing of reason and feelings in dialogue, that I have felt most alive and human.

You indicated that your studies with school children demonstrated major increases in pressure when they read a book aloud to the teacher and classmates. The fact that these surges were blunted when they read to a pet implies that the magnitude of such increases also had much to do with these children's perceptions of their own relative self-worth. Is that what led you to write *A Cry Unheard: New Insights into the Medical Consequences of Loneliness*? I am not implying that I was responsible for this subtitle but my review of the first draft happened to coincide with the 20th anniversary of the publication of *The Broken Heart*. I do recall suggesting that some reference to this would be particularly appropriate since you now seemed to be revisiting and expanding on "The Medical Consequences of Loneliness", especially in children with educational deficiencies.

JJL: You are absolutely correct. In a study published in the NIH Bulletin we suggested that attention to these pressure increases while reading might help children read in a much less taxing physiological manner. As we continued our studies with children I also began to suspect that what children experienced in school might have a significant effect on their long-term survival. I would later show that school failure was one of the leading causes of premature death in America and throughout the industrialized world. Failure in school destroyed a person's capacity to talk to others perceived as superior without repetitive and severe physiological stress. I then extended the concept of loneliness by tracing its roots back to childhood and decided to write an updated and expanded version of *The Broken Heart*. In *A Cry Unheard* I again linked marital status to health and illness, while broadening my horizons to integrate all of the communicative surges in blood pressure that we had observed in children. Prior to these observations we really had not focused on childhood experiences as a major risk factor for subsequent heart disease. Nor had I considered or speculated about loneliness from a developmental perspective with respect to possibly posing a potential major health problem for children in later life. I subsequently came to the realization that one of the major forces that shapes a child's capacity to communicate in a relatively stress free manner is the school system. And just as I had demonstrated in adults, I documented how **school failure is perhaps the greatest single cause of premature death in the modern world. I was also able to prove that there is a striking linear relationship between years spent in school and long-term survival. Dropping out of school before the tenth grade was linked to losing 20 years of life!** As noted on page 2 of *A Cry Unheard*, health experts report that if the death rates for white Americans with less than ten years of schooling were the same as for college graduates, there would be at least 250,000 fewer deaths in the U.S. annually. This ratio would be as high or even higher for blacks and Hispanics. The incidence of all types of heart disease increases as education decreases and this stunning relationship is not due to increased poverty or poorer access to medical care.

Peter Jennings may be a good illustration of this. He died at age 57 and had been divorced three times. He obviously developed lung cancer from smoking. All his life Peter Jennings had lamented the fact that he had dropped out of high school. Though he could communicate from the safety of an isolated TV camera, he apparently remained aloof and isolated in his personal life. In commenting on white men working in well-paying jobs, I asserted in *A Cry Unheard*, "Though they did not have much in common with residents of Harlem or Watts, some in fact, shared one thing in common — low education. And this one marker, in spite of all other advantages, seemed to exact a toll not unlike that seen in the heart of the ghetto itself Like a hound dog tracking an escapee, the onus of low education seemed to offer little escape for these working men. No matter how hard they worked, or how much money they earned, or how far up the corporate ladder they climbed, they were apparently unable to outrun the baying of their own shattered self-esteem. In the end, their lonely fugitive life exhausted their hearts, and they too were caught by the same hound that has imprisoned the men of Harlem and Watts for generations."

The destruction of self-esteem inherent in school failure ultimately forces many victims between a "rock and a hard place" with respect to establishing good relationships with others. An attempt to escape through isolation becomes equally unbearable, forcing those so trapped to pick their own poison or to allow nature to take its own course. These lethal consequences result from an inability to communicate effectively and without the distress (that people are unaware of) when they have been made to feel inferior to others because of educational deficiencies. All of our studies support this conclusion. When teachers speak to their students, they reach their hearts as well as their ears. Descartes would have us believe that a child's body is little more than a lunch box that carries a mind to class. My goal in a *Cry Unheard* was to dispel this dangerous but common delusion and to highlight the hidden hazards of educational failure as a major way to literally as well as figuratively break a child's heart.

PJR: You also emphasized why this was a particular problem in minority groups, especially immigrants with language difficulties and suggested various steps that schools should consider to anticipate or ameliorate these and other educational deficiencies. In addition, in considering some of its main messages, you had some intriguing speculations towards the end of the book about the origins of human speech that I would also like to share with our readers.

As we consider this book's central issues, it might be helpful to reflect briefly on the potential, albeit hypothetical, origin of human speech. Dialogue is the "elixir of life" because it may be Divine in origin! It is, to say the least, a sobering and humbling perspective; certainly one that gives language a far richer and more awesome potential.

Language resides in its biological home in the human body, and emerges as potentially Divine, because it is in fact biologically infinite in its potential. "Love", one of many felt words that describe one's own feelings, is spoken in a trillion cells, and thus understood to be biologically infinite when spoken in dialogue with another human being with his or her own cellular nature. And if that notion appears to be unsettling or mind-boggling, it does help one to understand how language could at least be biologically infinite in its potential and Divine in its origins!

From this linguistic perspective, "Paradise Lost" could also be cast in a new light. First, we are informed that the Creator decided "it is not good for man to be alone". With the arrival of Eve, created from Adam's rib, a new, indeed astonishing and potentially self-limiting word would have to have emerged from Adam's lips. For in the creation of Eve, the word I would have to be born. Conversing with Eve for the first time, Adam would have been required to recognize the existence of another human being, a "you" that necessarily required an "I" to engage "the other" in dialogue. This "self-concept", first born in Paradise, would have posed a variety of problems. All sorts of "self-concepts" and "self-centered" words were potentially added to Adam's lexicon.

The self-concept of "male" is now given meaning because of the arrival of a "female". "I" is a separate entity, separated from the "you", and thus potentially separate and distinct from the rest of Adam's world in Paradise. "Adama", first assigned the task of naming the animals, suddenly is confronted with the problem of "naming" himself! He is also assigned the task of "naming the creature" taken from his own rib. It was potentially a trap, one that paved the way for "the fall" — I alone, and now separated from "you", an "I" that is also separated from the rest of Paradise, an "I" quite distinct and different than Eve! It might very well have been the concept of "I" as a separate and distinct entity that led Adam down the slippery slope that led him and Eve to the Gates East of Eden.

You then state that the apple was forbidden to be eaten because as the "fruit of knowledge", it would awaken an awareness of "good and evil" that could further a separation from God and Nature, rather than being more connected with them. You describe Paradise as a place where everyone lives in harmony and perfect union with each other and the rest of Nature since separateness does not exist and therefore there can be no loneliness. As a result,

Perhaps it is we, trapped in varying degrees of separateness, denying our own loneliness, ... who create the communicative equivalent of Paradise Lost. Perhaps as self-centered 'ego-centric' creatures, we have wandered far away from our own origins. Perhaps loneliness itself is the measure of how far we have strayed from that perfect union, not only from each other, but from the rest of the living world as well! Even if the story of Adam and Eve, and their fall, is entirely metaphorical, it does help define the journey we must take.

For it is dialogue that offers the hope of uniting us, not only with one another, but with the rest of the living world. It is dialogue that unites, and dialogue that ends our separation and isolation, because it links us back to our origins, back to that which is biologically infinite and, if one is so inclined, back to that which is potentially Divine. Dialogue unites — dialogue abolished the 'I' of separateness. Dialogue is the vehicle that takes us back towards the paradise of union with others. It is dialogue, real dialogue, which fuels our journey through life.

As I noted in Part 1 of this interview, the first paragraph of *The Broken Heart* begins with "There is a widespread belief in our modern culture that love is a word with no meaning" and that "You can be intimate with someone and then leave, and nothing bad will happen." While it would appear that *Speaking of Love* deals with a topic that has probably preoccupied you for over thirty years, what insights into love did *A Cry Unheard* provide that stimulated you to write this new book?

JLL: Let me begin by commenting on your first reaction to what I hope to accomplish in *Speaking of Love*. I am not as interested in the disconnected way that e-mails, letters and cards can be used to convey love, although I agree that this has become progressively prevalent as electronic forms of communication are increasingly adopted. I am much more concerned by the way more and more people now speak outside of their own bodies about love. This extraction of speech via electronic methods of communication can, if we are not careful, perfectly mimic the pathological mode of communication exhibited by patients with serious personality disorders. Such people can speak about love literally from "no place" (including their hearts) and therefore also speak of love to "no-body". It is a type of disembodied means of communication that, for example, allows politicians to stare with great conviction into a television camera and assert that "I feel your pain".

Although he never developed the concept further, **Freud stated, "The ego is first and foremost a bodily ego". Today, except for its use as a sexual object, many people find their ego, their sense of worth, outside their true bodily selves, in money, power or prestige.** What has been lost is the awareness that ego and one's concept of an "I" can only exist in a heartfelt dialogue with others. There can be no "I" unless there is a "YOU". Love in such a dialogue is first a noun that is then converted into a transitive verb that crosses over to the other, the "YOU". I suspect that these speculative ramblings may be too abstruse for many readers to fully comprehend and I am attempting to bridge this gap in *Speaking of Love*. My goal is to discuss these complex aspects of "love incarnate" in some manner that will hopefully stem or reverse the epidemic of loneliness and alienation that seems to be mushrooming in our midst.

PJR: How far along have you gotten with *Speaking of Love* and when do you think it will be published? Have you chosen a subtitle for this book or could you list the titles of some of the chapters that might help explain its purpose or topics you intend to discuss? Can you give us an excerpt of something in your initial draft that would provide a clue?

JJL: There are any number of subtitles that might fit, such as "Rediscovering the Heart of Dialogue" or "Reclaiming the Heart of Dialogue". But my book must address a number of issues — complex issues that I hope I can describe without losing most readers, such as the way Descartes and Darwin joined forces to remove issues of love from language, and thus extracted issues of love from the human heart. The chapter describing these issues on this might be entitled something like "The Day The Apes Began to Love" or alternatively, "The Day The Universe Was Stolen From God". As you well know, I have long held a passionate desire to expose certain issues regarding Darwinian assumptions that have been consistently ignored or overlooked. A prime example is his discussion in *The Descent of Man*, where he favorably quoted other authors who suggested that the Irish were the possible missing link between man and apes. In contrast to the "Noble Scots", there were the "Ignoble Celts . . . who breed like rabbits and who will die like rabbits". This was about a decade after millions of Irish had died in the Great Famine. Although I would like to believe that Darwin would have been appalled, it only took 50 years for similar assertions of racial inferiority to waft across the English Channel and North Sea. Millions more would subsequently be slaughtered as "*Untermenschen*" by others who conceived of themselves as part of a master race "*Herrenrasse, Herrenvolk*". Never in the history of man has love been more absent from the earth."

Putting Darwin Back On Trial In Tennessee (Along With René Descartes)

My objections to Darwin have nothing to do with Fundamentalist concerns about evolution. Indeed, I believe their attacks on Darwin have been counterproductive and very misleading, since they not only misinterpret the meaning of man's appearance in Genesis, but also attack natural selection, which is biologically irrefutable. I believe that **it is the apes, not the Fundamentalists who should have taken Darwin to trial — perhaps charging him with defamation of character for linking them so closely to human beings.** The simple fact is that the Fundamentalists put the wrong book on trial!

No, I would like to take Darwin back to trial in Dayton, Tennessee, but hardly for the purported crimes addressed in his first trial. Unfortunately, the original trial was seriously flawed with respect to explaining the central message of Genesis and what Darwin's worst crime was really all about. In fact, **I would like to take both Descartes and Darwin to trial for removing language from our hearts, confusing the distinctions between emotions and feelings, and ultimately removing issues of love from our hearts.** It is Darwin's book, *The Expression of the Emotions in Man and Animals* and his commentary on fear, pain, rage, hunger, weeping and love that need careful scrutiny. In that book Darwin joined with Descartes and actually reversed the very meaning of the Incarnation — instead of "And the Word was made flesh and dwelt among us", they removed words from human flesh altogether! Perhaps my chief witnesses at such a trial might be Aristotle, Bacon and Pascal because of their truly profound philosophic perspectives* that the Cartesian mind/body schism tried to destroy. Descartes and Darwin placed things Divine somewhere out there East of Eden or on the other side of some remote constellation — God removed from Nature, God removed from our hearts, and everything else that was sacred in the heavens and the earth rendered banal and trite . . . nothing more and nothing less than mere clockwork.

* "Feelings are words expressed in matter" (flesh and blood) – Aristotle, *De Anima*, 350 B.C.

"To conclude, therefore, let no man out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far or be too well studied in the book of God's word, or in the book of God's works; divinity or philosophy; but rather let men endeavour an endless progress or proficience in both." – Sir Francis Bacon, *The Advancement of Learning*, 1605

"The heart has reasons that reason knows not of. We feel it in a thousand things. . . . do you love by reason?" – Blaise Pascal, *Pensées*, 1670

Perhaps then I can rest more easily on Valentine's Day, knowing that in my own life I tried to preserve that special day for our grandchildren and all future children by restoring love as a word spoken in and through our flesh and blood, from our hearts. Perhaps I might experience an even greater sense of satisfaction if I could also help to restore the human heart to the center of all educational life by helping parents and teachers to see on-line the heart of all dialogue in their children — and to enable parents and teachers alike to better understand that language spoken in our flesh and blood is as complex and infinite as the galaxies. Such an understanding and appreciation would be a wonderful way to pass something on to future generations that is truly precious.

Finally, Paul, I might never again get the opportunity to do so in such a public way, but I will always be grateful for all your help in this quest, and for making this long research journey together. Your heart and soul, indeed a great deal of your treasure (your *Yeshiva Bucher* scholarly spirit, your love of ideas) have been gifts that sustained me over the years. For that, and the privilege of your friendship for over a quarter century, you have my heartfelt thanks.

PJR: Since you insisted on including this last paragraph and at the risk of sounding like some Mutual Admiration Society, the truth is that I have learned much more from you than vice versa. In addition, the pleasure and privilege of working with you has been all mine. This interview has been a very special delight for me and I look forward to many more years of collaboration and keeping our readers updated on your progress with *Speaking of Love*. I should add that Jim has arranged for copies of *A Cry Unheard: New Insights Into the Medical Consequences of Loneliness* to be made available for \$12.00 plus postage (instead of \$25.99) by contacting Kathy Laramore at kathy@lifecarehealth.com or by calling her at 1-410-321-5781. Information on reduced prices of other books is available at www.lifecarehealth.com, which has a description of his Life Care Health Clinic and Foundation. I would also urge you to visit www.mesicsfitness.com/mradio.asp to listen to an interview with Jim. This is one of the web sites maintained by Dr. James Manganiello, a Harvard psychologist who has a very informative and popular radio program. This site contains similar interviews with other prominent researchers and scientists on various topics devoted to health enhancement and improving the quality of life. A future interview with Jim is in the works – so stay tuned.

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