
SILENCE: BECAUSE WHAT'S MISSING IS TOO ABSENT TO IGNORE

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Abstract: *What is silence? Is there a psychology of silence—and what does the literature reveal? The exploration of the concept of silence in the psychological literature reveals an almost biological entity—that speaks, grows, hurts, and conceals—despite being nothing at all. Humans are a verbal species, so verbal in fact that the very absence of sound seems to make humans uncomfortable. This verbal world—so dependent on manifest explanation—may make silence one of the most effective means of communication (even though it appears to communicate nothing). This research paper will explore the psychological literature, and show that silence speaks though it says nothing, grows though it has no substance, hurts though it can touch nothing, and conceals though it cannot hide from perception. Though it consists of nothing in particular, it generates psychological phenomena such as pressure, anxiety, suspicion, isolation, rejection, inner conflict, ambiguity, and agitation. Despite its lack of sound or meaning, the language of silence is spoken by all—and once silence is here, its missing explanation is too absent to ignore.*

Keywords: *spiral of silence, absence of explanation, biophilia, groupthink definition, interrogation techniques, culture of silence.*

What is silence? What is the psychology of it? The literature is not silent on silence, revealing an almost biological entity, one that speaks, grows, hurts, and conceals, despite being nothing at all. Humans are a verbal species (Hauser, 2005). The absence of discernable sound often makes humans

uncomfortable (Manassis, Tannock, Garland, Minde, & Clark, 2007). The presence of an empty span of conscious time, such as the silence between an expression of need or pain and a reply, becomes spontaneously filled with an urgency to fill it (Biro & Biro, 2011). This

verbal world is so dependent on language that the absence of language, manifested as silence, may be the most effective means of communicating anything that remains undefined (Ekman, 1998; Hauser, 2005). Humans can spot an *absence of explanation* from afar (Darwish, 2011; Elhammoumi, 1996; Vygotsky, Luria, & Rossiter, 1992). When will the silence end? What *goes* here? This research paper will explore the psychological literature, and show that silence speaks though it says nothing, grows though it has no substance, hurts though it can touch nothing, and conceals though it cannot hide from perception. Though it consists of nothing in particular, it generates psychological phenomena such as pressure, anxiety, suspicion, isolation, rejection, inner conflict, ambiguity, and agitation. Despite its lack of sound or meaning, the language of silence is spoken by all, yet silence is something that is so missing, it is too absent to ignore. In the absence of explanation, silence brings what is hidden into the light and though we are urgent to fill this emptiness with something, we can never be sure if what we offer up to the Silence, is enough for it to go away.

Language - Silence Speaks

How is silence a language? Silence speaks an ineffable language everyone seems to know but no one can say. It tells us what is not here; it makes the obvious ambiguous. It is nonverbal yet it has idioms; it is like a pause between a question that was not asked, and an answer that did not reply.

When the Absent are Present

Carbaugh (1990) states that how a community uses silence to communicate is at least as important to study as how that community uses spoken meanings to communicate to one another. How does silence become such an effective means of communication? How can “being silent”

communicate anything meaningful? The reason is not the silence (which is manifest); the reason is the expectation *hidden* in the silence (which is not manifest). When we anticipate something should be *here*, but it is saliently *not here*, silence is the presence of that absence. As Freud (1920) illuminated long ago, what is manifest is already here, and does not beg discovery; what is latent or hidden in suggestion is not quite here, and teases imagination.

By example, most are familiar with the ritual of *roll call*, during which a list of names is read, and, upon the breaking of the silence after each name, someone says . . . “Here!” This habit we have of calling out a list of labels of things we believe should be here to verify that they are, is intimately bound to the need for all of us to anxiously await the unveiling of the absent response. Time appears to stand still as we await the appearance of the delayed agent who must be attached to the label hanging in mid-air (Gütig & Sompolinsky, 2009). Frequently, activity cannot continue while this silence pervades; so, having called the name of this thing which is not here, this is when *Absence* is here. A present thing would reply, so that if an absent thing does not reply, this Silence is very much like the *Absence* saying . . . “Here!” Silence may be both the softest and loudest of all communications, because like zero in a denominator, it is simultaneously necessary and meaningless, evidential yet undefined, existent yet has no reciprocal proof it exists (Quinn, Lamberg, & Perrin, 2008; Wagner, 2009; Weisstein, 2015). Though it is *quantitative*, we can never determine how quiet or how loud it is, guessing, instead, is what fills our thoughts like epistemological qualia (Haikonen, 2009). Silence is almost the voice of our fear and of our doubt, or like roll call, the sound of something which *should* be here, but is not. Silence is such a sound. It is so “loud” we can barely hear

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ourselves think. Silence has not said anything, yet it has our complete attention.

The Language Spoken by Silence

The power that written language has over us lies in the suggestive power of the arrangement of symbols we transit hopefully or anxiously, and wherein the collision of inner expectation and inference with external latency and ambiguity often results in far more words than could ever fit on a single page (based on Chomsky, 2007). The famous Noam Chomsky called this effect, eloquently, “a discrete infinity of utterances” which we might describe here as *potential responses* whether uttered or not (Rieber, 2010, para. 24). The affective elevations which arise from this intersection of forces become the communicated meaning we think we see. The author of any written communication cannot disambiguate everything his or her audience might ask in a future which is not yet here, so that whatever was left unsaid is often the magnitude of hopes and doubts that give meaning and intensity to the story. McColl (2012) divides the language of silence into two categories: for good, and for harm.

When silence is present for good, it is a volume affording the diffusion of elevating argumentative emotions. It is a mutual silence, a manifest silence, whose reasons for being present are clear and mutually understood. It is an epoch of agreed calm during which the emotions so contentiously engaged may withdraw and consolidate what has been said.

When silence is present for harm, the injury arises from either the *manifest nature* of the silence itself, that this silence is meant to injure, or the intentional hiding, *latent nature*, of any reason at all. Reflection by the object of that silence on this hidden explanation results in inner seeking of faults within. For couples, good silence is more

defensive, avoidant, reluctant, not of the partner but of the negative emotions previously shared, and harmful silence is aggressive, derisive, compliance-seeking of the partner proper (McColl, 2012).

Reconciliation is the goal, either way, but one is contributive and mutual, while the other is withholding and unilateral. Battered women sometimes carry silence with them out of fear, as tribute to prevent a partner from leaving, or as an offering so as not to lose any more symmetry or privileges (Lewis, 1996). Victims of domestic abuse sometimes lose their personal identity completely, in the silent substitution of “we” wherever “I” should go during verbal behavior (O'Grady, 2015). In this sense, the reticent contents of Silence when meant for good suggest hope, and the taciturn contents of Silence when meant for hurt constitute fear. The language of silence is deliberately ambiguous.

The Hidden Lexicon of Silence

Whenever there is a presence of the absence of something needed, the silence that hangs in the air is like a hidden lexicon of words that have been invisibly said. Some of these hidden terms, in the silence, Capps (2011) calls shame, omission, repulsion, rejection, embarrassment, indifference, punishment, and suffering, like a child of lost synchrony during fundamental attachment development, perhaps Augustine himself. Reflection on words “spoken” during the silence, can result in a harvest of loneliness, isolation, lost opportunity, hidden portents, or an ominous expectation which never completely goes away because it never completely arrived and told us why it was here. Capps suggests that much of the cold fog between strangers meeting for the first time in every venue, is due to the fear of the silent reply that may come as a reaction to the timid hello. Neither love nor acceptance withhold or inhibit themselves

any more than tears of joy can hold themselves back; but secret feelings of hurt or harm often hide behind self-inhibition of reply.

Silence is a nonverbal form of communication with a nonverbal language. Postural signals often form the semiotics shared by participants in silence. Postural silence is like a force of expectation that puts pressure on one side of the conversation, and indicates hostility or disagreement (SheKnows, 2014). This kind of pressure can induce palpable, physiological anguish. Or, the language of silence can indicate something profound has happened, inducing respect, contemplation, or awe. Well-known is the tradition of taking a moment of silence to welcome an empty span among the hectic ones, to allow silent empathy to overflow the width of moments normally afforded. Nonverbal silence can cast a pallor of disdain, by not replying to someone expecting acceptance or at least tolerance. Additionally, an effective listener can employ silence to express a volume of positive regard that welcomes any outgoing expression at all (Rogers, 1961; Wittig, 2001). This kind of unspoken communication indicates empathy and compassion, two hearts sharing the burden of one. Therapists often make effective listeners.

Idioms for Silence: A Deafening Lack of Sound

Language has its peculiarities, and silence is peculiar. Our expression “the silence is deafening” is a paradoxical twist of reason. Silence cannot be heard, and the deaf could not hear it even if it could. There is a curious lack of corresponding words like silence among the other human modalities (e.g. the darkness is blindingly bright, or the lack of aroma is intense). Perhaps it is because silence implicitly suggests both ends of a spectrum of sensory need. By

example, at one end Keller (2003) reminds us of the terrible silence in the incapacity to sense social contact, versus the comfort left behind when social needs are silenced. At the other, Sidransky (2006) reminds us of the terrible inner cacophony in the capacity to sense sound when there is no sound to sense. Silence is like a crucible that tries our patience, leaving only an unpredictable semantic paradox behind.

Thomas Carlyle (1997) had a lot to say about silence; for one, that there are just two things which are impossible: to forget something you know, and to ignore silence without saying something. He used phrases like under “cover of silence” (p. 59), a darkness, a secret, a persuasion to yield and cease trying, the tumult after death, flood, or plague. In silence the plans of unseen things are knit together in hidden gestation, and an unspeakable cunning bides its time until surprise is assured. In silence is meaning between the concepts of what is latent and what is manifest, and creatures often find their only path to expression in it. For Carlyle, silence was at once a virtue and a lack of that, depending on whatever anticipating listeners were last expecting.

Luna (2014) reminds that we can come face to face with silence while utterly alone, too, and that is a different *kind* of silence. We will do anything to shut out the silence, run from the silence—by putting our hands over our imaginations and avoiding its beckoning meditation. Suddenly devoid of stimulation, the air is filled with noise from somewhere deep inside us. Solitary silence requires that the sole listener do something about it. The more consoled we were, the more non-seeking of conversation we were before we became alone, the more inconsolably seeking we will become when we find ourselves suddenly alone (Kübler-Ross & Kessler, 2005).

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Nonverbal Silence, Emphasis, or Disambiguation

It was Mehrabian (1981) who suggested that as much as 90% of communication is nonverbal when trying to express like or dislike (Mehrabian & Ferris, 1967). Nothing is more nonverbal than silence, and nothing is more *silently* nonverbal, than lack of behavioral reply. Nonverbal behaviors can be used to communicate lack of response, emphasize a verbal response, disambiguate a verbal response, or misdirect interpretation of an apparent meaning. This form of silent message can either mask or reveal intent (Swami, 2013). Hopkins (n.d.) explains that strategic explicit interruptions of verbal communication, silence itself, can provoke feedback nonconsciously, and the relative presence or absence of either speech or gestures can be minimal or nil, and still constitute an expectation of contribution. He also relates that *kinesics* (nonverbal communication) are eerily similar to audible languages.

The purpose of language seems simply an urgency to communicate emotion; efferent feelings come out in body or voice, and the symbols we use seem more like airborne stimuli with the power to disambiguate signals when they arrive, rather than purely for the sake of unemotional, factual data (Ekman, 1998). Silence then, does not mean emotion has stopped, only that the carrier wave is unmodulated right now (either visually or audibly). Ekman (1998) shares that the eeriness extends to the level of subliminal detection; microexpressions in the face can occur so briefly neither party of the conversation notes them consciously, despite having *exchanged* them through facial musculature. Darwin (1872) wrote of the connection between emotions and expression long ago, and how many species share emotions without words. These

“microbehaviors” articulate in *least visible time* a fine control of emotional (dis)ambiguation, either intentional, which is commensurate, or unintentional. The latter occurs when breaches in the social mask permit the dissonance, between honest but hidden feelings and dishonest but manifest words, to circumvent conscious image management. Investigative sciences such as forensics document the effort to micromanage nonverbal behavior, while detectives and interrogators seek to uncover malingering and dissembling (Harold & Hall, 2001).

These subtle cues in facial musculature, eyes, limbs, or posture allow human visual pathways to function like the air between an oral source and a pair of listening ears. Surrounded by silence, the urgent peripheral senses need to be filled from somewhere, so that communication may actually continue in silence as the anticipative party seeks any clue at all in the posture of the other. This pause between the capacity and incapacity to interpret social signals can be disconcerting enough to trigger inner disquiet similar to nociceptive signals (pain) that ache and ache (SheKnows, 2014). Silence is the ostracizing of the contribution most needed by some locus of urgency; it is the exclusion of the fundamental feeling of want from the possibility of ever being perceived, so long as this silence pervades and trauma's volume grows in its stead (Berkeley, 1979; Zadro, 2013). Nothing is more nonverbal than silence, and nothing is more *silently* nonverbal than a lack of any disambiguating gesture.

Culture - Silence Grows

How is silence a culture, and how can something insubstantial *grow*? Silence often grows like a question in a petri dish, or a void that guesses fill. Once it has been here, silence cannot go away. It is almost

like a culture of discomfort that blossoms in the dark, or a city where things deferred in youth may grow up to be permanently ignored at maturity. It is like the dawn of an absent sun and the diurnal presence of absent light. Silence, perhaps, is the negative equivalent of space and time.

A Rift in the Meaning of *Here*

What is silence? How can we contemplate something which is not present? It might help if we first ask ourselves, what does “present” mean? The Western concept of “the Present” is very exteroceptive, what time this is, and what place this is. Awareness of noise or din, of light or sound, in time or space, organized or chaotic (according to James, 1950), is what we call *Presence*. Lulls, which are unexplained intervals of quiet, are unwelcome impediments to the goal-focused, time-urgent, Western vigilance, which become frustrations if these unexplained epochs are not quickly claimed by actions (*pre-selection for action*, perhaps, extending Allport, 1987).

But in Eastern thought, “Presence” is very interoceptive, and the *gaps* between things hold the power of and over thought, not the things themselves (Laozi & Mitchell, 2004). As Mulford (2011) would say, thoughts are things, too. In Japanese thought, the concept called *ma* is something *between things*, between this moment and the next (Pilgrim, 1986). *Ma* describes a force of presence which is neither now nor here, and yet its duration is so indescribable and its presence so unavoidable, this “negative space” called *ma* has more power in its unseen silence than any visible din. *Ma*, like the Western word for silence, describes a state of time and space which is indescribably indivisible (Iimura, 2002). The power of this quiet which envelops awareness forces us to listen, until the still, small voice of silence that we know is

beckoning is finally here. While it is not, our own inner voices rush upward and argue over what should be here so that consciousness does not seem to like a void (Capps, 2011; Jonsson, Grim, & Kjellgren, 2014; Rüedi-Bettschen et al., 2006). In Zen, a word stemming from the absorption of, and being absorbed by, awareness; the silence before the first sound that breaks that silence is like the realization that semantic intercourse has been happening in secret, birthing its offspring into the open and into the light (Zin, n.d.). Perhaps this is why silence makes such an effective means to elicit information from another.

Pilgrim (1986) reveals that the Japanese word *ma* stems from the concepts *mon* (gate or portal) and *tsuki* (sun or moon), like the shafts of dawn’s light suddenly bridging the gap between the light and the dark, the known and the unknown. This epoch of *ma* symbolizes the boundaries at the edge of reason, where this silent but very “visible” interval between meaning and hope of meaning becomes a void that must be filled. Silence then, when we are expecting sound, is a rift in the meaning of *here*.

In the Presence of Absence

Looking back on his own existence, Darwish (2011) presciently gave us the phrase “in the presence of absence” in the poignant title of his work. In one of the two most prominent insights shared by their author (the other being positive psychology), Seligman (1967) revealed that the absence of something does not make it go away. In a dissertation exploring the phenomenon of learned helplessness, the author found a far more significant helplessness any of us can become subjects of, waiting for the arrival of something once present, but no longer present. In that paper the thing awaited was a zone of safety and comfort, but the insight also revealed that Absence is a thing, a very

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present thing. During the awareness of Absence, lots of things are present—those anxious drives within urge us to guess what *should* be present, but is not present. In the fashion of Frankl's *paradoxical intent* (2006), the urgency induced by sudden awareness of the Absence of something results in its constant arrival to awareness. In contrast, the initial awareness of the Presence of something results in the eventual absence of our awareness of it, as urgency ebbs away. The Presence that Absence brings to this constant upwelling of motivations, to figure out what, exactly, is not present, is the basis of the power of silence.

Culture of Silence and Silent Cultural Differences

As with any gathering of clans from the ancient past to modern times, the social and cultural trajectories that diverged between gatherings diverged with respect to the culture of language and silence as well. Native Americans, for example, differ from many other Americans, in that the latter are direct and perceive verbal pauses during discourse as awkward, whereas the former view verbal delays as necessary, and directness as improper behavior for discourse (Heit, 1987). Fujio (2004) explains that pauses and stops during communication can mean vastly different things to different cultures. Rhythmic timing beneath language communicates different things in different languages (Euler, 2013). In the American culture, directness and lack of pauses are expected to ensure progress during business meetings. In Japanese culture, however, such directness is considered impolite, and pauses are interjected to allow respectful intervals of meditation and reflection, or to express uncertainty politely. Fujio (2004) relates that these pauses are received with frustration and discomfort by Americans. Often these

silent intervals represent very simple misunderstandings, provision time for recalculation and rephrasing, or are simply the result of inner translation. As Iimura (2002) and Pilgrim (1986) explained with regard to the Ryoan-Ji garden short film subject, the Eastern custom of permitting gaps (*ma*) in the rush of life express respect and introspective focus. The sense of *absence elicited from* silence in Western culture, though, creates a cultural rift not unlike *ma* itself, during which parties must discover the missing meaning. To add to this silent confusion, there is a sort of *comorbidity of intercultural differences* when it comes to intracultural differences, too. The female gender in some societies may be even more latent and reticent than their male counterparts, for example.

By reason of the fact that much of life is spent at work, businesses have also developed cultures of their own. According to Verhezen (2010), *moral silence* can be bad for business, resulting in anonymous complaints and word of mouth which fill these silences with lessened employee or customer loyalty. The author suggests integrating open dialogue and corporate governance, instead of the awkward unspoken things which might be filled variously with less positive guesses. A culture of silence, as with more extreme forms such as groupthink, discourages the creative self-doubts that lead to positive change and group growth.

Sometimes the presence of silence is silently interpreted (or misinterpreted) as opposition or passive avoidance, as Fordham (1993) shares with regard to minority group attitudes which are seen as threatening by the majority or its representatives. Coplan, Hughes, Bosacki, and Rose-Krasnor (2011) explain that educators may perceive externalizing, disruptive students as merely in need of behavioral remediation, whereas internalizing, shy students may be perceived

as unintelligent due to their non-responsiveness. Fischer (2006) suggests that the *deafening silence* of student apathy may be the result of differing learning styles, however, and the need to add variety may alter the silent channel-changing of student attentions when the educator changes channels actively.

Negative Space Can Become a Positive Silence

The *ma* concept suggests non-space and non-time, a negative space not quite here, like a vacuum on the far side of a dark and fuzzy looking glass (SciTechDaily, 2013). How can space be negative? How can the need for time accumulate as negative hours? Negative space-time does not always mean negative affect; sometimes (like *ma*) it is a positive invitation in our busy schedules and anxious lives to seek and recover the stress-free beginnings we began with.

Though silence seems personal, silence is also societal, as exemplified by the ability of certain societies to embrace the healing and restorative effects of silence (such as in the Japanese culture which practices Shinrin-yoku). Practitioners are encouraged to “forest-bathe” allowing nature to enter their body through all five senses, and to embrace the peace and quiet of the forest (Shinrin-yoku, 2014). At the present time, Japan hosts 53 official Forest Therapy trails with a goal of having 100 of these trails by the year 2022 (INFOM, 2014). The physiological anthropologist, Yoshifumi Miyazaki purports the “back-to-nature” theory which states that humans evolved in nature so that is where we feel the most comfortable. When we are deprived of that natural contact or immersion in nature, our psychological and physiological functions do not function properly (Bum Jin, Tsunetsugu, Kasetani, Kagawa, & Miyazaki, 2010). Maybe nature is silently calling us home.

If nature is “calling us” from the silence, maybe we “hear it” beneath awareness, in our more ancient processes? Subjacent to efforts like Shinrin-yoku, are the concepts *biophilia* and *vagal theory*. The famous Erich Fromm (2010) described biophilia, the love of life-like or living things, as the positive opposite of necrophilia, the love of death-like or mechanical things. In some primeval trace of what it means to be human, there seems a memory of abundance versus scarcity; there seems a memory of love of life, rather than avoidance of death. This life focus, biophilia, still persists within, but requires we rediscover our natural beginnings, outside the hectic din and confusion of urban life that distracts us and makes us fearful, frustrated, and selectively possessive and defensive.

Perhaps as human beings we miss our wanderlust, and need to get lost again so we can find undiscovered, undescribed personal meaning again, that place where courage and worth can still be sought and earned (Zilcosky, 2004). It could even be that the *repetition-compulsion* mentioned by Freud and elaborated on by Fromm (like Freud’s *Thanatos* to Fromm’s *necrophilia*), is a cognitive distortion seeking escape from the lack of some singular affective fulfillment in a multiplicity of unfulfilling substitutes. This natural biology, Darwin affirmed, is toward an uncountable variety of infinite uniques which find survival in being non-similar and unpredictable. Yet anxious society requires persons and outcomes be as similar and predictable as possible to plan for the survival of its urgently artificial conception of nature, an anxious frequency of predictable similars, instead of an unpredictable plural of joyously differential potentials (Darwin, 1876).

Perhaps the three-body problem of chaos theory fame, like fractals in nature, is

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nothing more than a hidden purpose practicing *imperfectly* self-similar collision avoidance, by forces respecting one another's struggle to variety (Andrews, 2013)? Fromm suggested that this dual nature has but one urgency, to survive. He also believed that the crucial condition to develop biophilia (love of life) was to be immersed in an environment that fosters the love of life during critical human lifespan development. When *reach* is afforded positive social scripts to role-play and become the persona that cannot wait to live life, *reach* is disafforded opportunities to acquire negative scripts that fear the loss of life when anxiety and urgency call (Holzman, 2014). Perhaps biophilia speaks to us in the language of environmental silence when we pause to reflect on nature.

Like Shinrin-yoku, biophilia alone is a necessary but not a sufficient condition for the feedback needed to dispel stress and elevate well-being. For learning and growth, for revision of unhealthy thoughts, feelings, and behaviors, the conscious being must have an interoceptive feedback level. This visceral, perhaps polyvagal proprioceptive feedback confirms well-being and disconfirms malaise, by unavoidable appreciation of the accelerating approach of positive affect and accelerating departure of negative affect (Garland, 2013). It is about survival; Porges' polyvagal theory suggests we have a (silent yet "audible") drive and feedback system for affectively fulfilling social engagement. However we also have an intrinsic sympathetic/parasympathetic feedback system to alert us to danger (fight/flight). The conflicting goals of these two require we be mindful of interoceptive feelings so we can accommodate the needs of both. Tsakiris, Long, and Haggard (2010) argue that body ownership is experienced in a conflict between the anterior cingulate cortex (ACC) and anterior insula (AI), which becomes a phenomenological

experience of emotional consciousness that Craig (2008) terms the *global emotional moment*. Lee, Dolan, and Critchley (2008) contribute that this authentic self must suppress itself and its manifest responses to avoid perturbing an anxious social curve of emotional expectation, creating a frustrated agency attempting to perceive itself and be perceived, but inhibited from doing either. Just as there can be external silence when ears neglect voices, there can be inner silence when perception neglects itself.

To be complete, technological options do exist to monitor and learn from biofeedback, in contrast to natural transit of waterscapes, forest settings, mountain meadows, and grasslands. Garten (2011) offers a neuroscientifically tested biofeedback system which can provision meditative alleviation of stress conditions, without leaving an urban area. However, many also caution that supplanting the natural world with the artificial will come at a cost. Though adaptation will continue despite the silent loss of our capacity to discriminate this accelerating divergence of humanity from its nature, the love of living things will not, becoming sublimated by the craving for mechanistic affection (necrophilia and technophilia). Authentic, biological agency will quietly fade from memory and not be missed, like soft rains with no one left to appreciate them (Bradbury, Leialoha, Woods, & Woods, 2002; Kahn, Jr., Severson, & Ruckert, 2009). Whether subsumed in and by nature, or consumed by its pursuit in urban situ, knowing thyself may help turn the *silent*, negative space of deferred natural attentions into positive fulfillment and private, positive time.

The Manifest Purpose of the Absence of Explanation

Purpose seems to be latent, whereas the struggle for hidden purposes to be

perceived and acknowledged seems very manifest (Berkeley, 1979). It appears that in the continuing absence of explanation we begin to seek the purpose of it, so that it has a chance to become manifest to all. Otherwise, we just assume the most obvious reason is the last one uttered. Spinoza (according to Damasio, 2003), called this hidden purpose *conatus*; Berkeley (1979) called it *the need to be perceived*. Freud (1920) called it the *latent* needing to be *manifest*. Recently, Panksepp (2010) called this unending default exigency *SEEK*. In this seek mode, humans perceive meaningful shapes in inkblots, clouds, even slices of bread (Hadjikhani, Kveraga, Naik, & Ahlfors, 2009; Kleiger, 2012; Zimmerman, 2012). According to an insightful analysis by Du and Montiel (2013), the kinds of latent questions we seek within and between manifest stimuli are:

- Was this to communicate or miscommunicate something?
- Was it for good or for ill?
- Was it to heal or to wound?
- Was it to cloak or to reveal?
- Did it signal accord or discord?
- Did it mean we should contemplate or avoid contemplation?
- Was it for courtesy or impact?
- Was it a cultural accommodation or to show disdain for culture?
- Was it meant as a “projectile” aimed to inflict discomfort and await agreement, or a lowering of defenses to welcome treaty?
- Is this silence here to remove argument and bring us together, or to push the other away with an unapproachable argument?

The common purpose of either speech or silence, hides in the fact that humans use the same anticipative process to interpret one or the other (Du & Montiel, 2013). Silence is when we do not respond to need, and need is more present than its

absent reply. Silence communicates meaning by invisibly inducing an ambiguous need to find it, just as speech communicates meaning by attempting to visibly disambiguate each prior word, spoken or unspoken. The manifest purpose of the absence of explanation is that it so easily defeats our own purposes.

Prejudice - Silence Hurts

How can silence hurt? Silence can separate the need to belong from its hope of belonging. Silence can communicate the urgency not to communicate. Silence can hide in voices no one can hear, or foster whatever social suspicions require to quietly fuel conflicts.

Ostracized by Silence

Abraham Maslow’s (1943) hierarchy of needs, which has found rich adoption in many disciplines, describes a fundamental need, just above the fundamental physiological needs of food and drink and durations of those supplied by security and shelter, called *belonging*. Belonging is a hunger inherent to being human, being accepted, being loved and needed. Maslow felt it so important he added an extended version of this need above the apex of his famous pyramid of needs. In transcendence the individual ceases to fret over belonging at all, because (as Kohlberg described) the Self becomes subsumed in the needs and satisfactions of the All, and one is as much the other (Koltko-Rivera, 2006). In a society of such belonging, to be ostracized by silence is to lose access to a need as fundamental as food and drink, security or shelter. Marginalization by the group to which the Self finds its identity fulfilled is akin to physical pain, just as physical pain would follow inaccessibility of food, water, or warmth (Gerber & Wheeler, 2009).

Group rejection has a long history, from the Greek practice of writing a feared

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person's name on an *ostrakon* (a bit of shell or shard) to be cast out by secret vote (for fear of one's abilities), to the practice of *cherem* and excommunication in the time of Spinoza (for fear of one's thoughts). Damasio (2003) shares that this planned group silence, often accompanied by a ritual incantation calling down hurt upon the feared differential perspective, caused the flight of those who once belonged somewhere, from place to place in desperate hope of simple ideological acceptance. From Portugal to Holland, Sephardic Jews cast out for being Jewish *marranos* in Portugal, were cast out from Holland for not being appropriately Jewish in Holland. Spinoza himself had his greatest works ostracized even after his death, as though to erase like a cartouche his name itself and never be spoken again except in quiet whispers. Gutenschwager (2013) relates that acceptance outside the family is as fundamental a need as family, and that mutual regard in Epicurus' garden was the social glue, rather than the less intuitive glue of social expectation of conformity and similarity which tend to fear.

A corollary to the concept of belonging, is the linguistic term *clusivity*. Some languages have a "we" concept which may or may not include the speaker ("I"). A person may speak on behalf of the group affiliation without inclusion of self in the information expressed. The *Oxford English Dictionary* (2014) defines clusivity as being either enclosing (imprisoned, excluded) or encompassing (non-imprisoned, included). Criminal justice systems frequently use the former form of clusivity by isolating an inmate from social contact and conversation, resulting in agitation and delirium in those with no prior history of mental health problems, exacerbation of symptoms for those who do, and often future failure to reintegrate with the prison population in either case (Grassian, 2006). Public

disclaimers often use clusivity to detach the group identity from opinions expressed within the group identity (Strauss, 2004). Ostracization, it seems, can work either way.

Securely Attached to Insecurity - Groupthink

Nowhere is the use of silence and self-silence more prominent than in the groupthink phenomenon. In groups, silence takes the form of various levels of censorship, either for information coming into the group, leaving the group, or between members of the group. Cook (2002) describes the use of pressure to mandate self-censorship, for example, for the good of the group. Group members often feel obligated to be taciturn, deferring to the apparent unanimity of beliefs. Groupthink often arises from rigid hierarchical structures within which the non-questioning of superiors is expected, resulting in self-censorship despite continuing dissention (Lewin, 1951). One of the symptoms of groupthink, relies on the human tendency to doubt self and the self's decisions when in the company of social others, the majority of which hold a different view. Solomon Asch's famous line experiments evinced that group opinion could easily sway personal opinions despite visual evidence to the contrary (Jackson & Saltstein, 1958). In studies of group conformity, we can think of the self-inhibition of disagreement of opinion as a form of differential silence, even if the individual is not verbally silent when stating agreement. Cook (2002) explains that important group decisions cause group stress and great insecurity, inducing the need for quick agreement despite a lack of consensual opinion. These silent watchdogs of group identification and group behavior inhibit verbal expression of concerns, creating an envelope of secrecy and silence. Groupthinkers are securely attached to the group's insecurity.

Silent Incentives to Remain Silent Witnesses

Often, the same stimulation silence induces to bring evidence to light, is useful to ensure silence persists and evidence remains hidden. Crimes that occur when justice was not looking often have silent witnesses who were. Criminal silence though, has its own set of ethics that makes overcoming that silent testimony a challenge. Kocieniewski (2007) reports that there are far more silent witnesses than vocal ones in high crime areas, but *snitching* is a cultural norm more significant than justice where economic survival distorts the value systems of neighborhood logic. Witnesses fear to come forward for fear of being ostracized by their own community even if offering testimony might make the community safer for all. Intimidation is common; residents promote anti-snitching campaigns via music and paraphernalia; excommunication or worse is a real possibility. Many witnesses in such neighborhoods fear their own misdeeds will come to light in exchange for testimony. Law enforcement often fears to lose innocent witnesses more than to catch guilty criminals, and the concept of obtaining justice can get lost in the more severe outcomes that come as a result of testimony rather than cautiously remaining silent (Kocieniewski, 2007).

Bauer (2008) discloses that witness silence can be bought, or witnesses can be paid to come forward, both of which challenge the ethicality of purchased testimony. Laws exist to help prevent legal counsel from seeking the silence of potential human evidence that might be helpful for opposing counsel (noncooperation and secrecy), but ambiguity and interpretation are also the specialty of jurisprudence. Johnston (1997) asks whether compensating witnesses should be different for the prosecuting or defending attorneys, if it

might compromise the perceived integrity of the process of adjudication itself. In addition, like the scientific struggle to “arrange randomness,” *jurymandering* struggles to arrange judicial outcomes via selective jury selection (King, 1993).

The elephant in the room that Pausch poignantly prompted us to “introduce” rather than neglect (i.e. a key witness who is present but not allowed to testify) is possibly the same reason that our silent conflicts remain conflicts (CarnegieMellonU, 2008). The solutions remain hidden in plain view, where certain topics are not mentioned but avoided (O’Grady, 2013). The very same fearful stimulus that silence exudes to make vocal our guesses about this missing meaning, can sometimes become a valuable reason to keep hidden those same questions.

The Silent Gender

In addition to key intercultural aspects, intra-cultural differences express pronounced dividing lines, with silence as the veil between being seen and heard (or just seen and hardly ever heard). Fordham (1993) shares the poignant struggle of silent success: African American women who must pawn their cultural identity in every way which might have given them identity (race, gender, personality). In a patriarchal society, one gender is invisible, and finds promotion by not being “too loud”. When gender is split by race, the “doubly-refracted” must sever ties with everything dear, diffusing sociocultural identity into a social silence that finds its voice in achievement. Surrendering color for silence, gender for silence, and family ties for quiet fit, Fordham sensitively expresses the endless levels of indirect dis-individuation required to rise above the din of prejudice. To find acceptance, this silent gender must give up any chance of being accepted for who they are, letting the volume of who they

really are become a silent witness to self-exclusion. But there is a light at the end of the tunnel; as Gilligan (1982) intuitively, the female persuasion does not see a black and white between silence and voice, either. There is a “different silence” and a “different voice” which can be used to say what cannot be said. This is not a contest of class, but an inter-relational web of need, and those things which are not asked when they should have been, must be asked eventually. When they are, achievement will answer them in the voices that were left out.

Coplan et al. (2011) relate that shy teachers are likely to express more concern for shy (quiet) male students, perhaps due to social expectations of male assertiveness. However, too, a match between a reticent-like educator and reticent-like students elevates the chance that empathy will mediate the impact of attributions of less intelligence on those who learn silently.

Doubtless, the most evident among the silent genders, are those to whom neither Humankind nor Nature have credited a place to be natural selves when among social others for whom “natural” means the normative not *authentic* self. Kimmel (1994) shares how those whose gender identification does not accord with the visual or functional expectations of others (LGBT and more), must dwell in a silence of self that is afraid to speak even for similars—for fear of recognition and social expulsion. Moreover, though the proprioceptive self is secure in its self-identification, the security of the larger self, called society, may feel threatened and label as illness what is only called variety in Nature. Kimmel (1994) likens the silence of those whose appearance does not match either of our inexorable dichotomization of choices, to childhood games, like hide-and-seek. That game had a phrase: “Olly olly oxen free free free” which offered pleasant exception to the rules of the game, so that all could come out safely and

play, with no fear of exposure, no threat of punishment for those who had been hiding. When we heard this phrase, we ceased our trembling for fear of discovery in our hiding places. But the social games that adults play do not have an *olly oxen*. The unspoken rules of the game keep us from being honest with one another, and gender has a number of social rules

Silence as a Means to Escalate or De-escalate Conflict

Just as conflicts may arise with the least number of participants: a pair, a couple, or even a single mind divided by conflicting needs, so too conflicts may engender multitudes caught up in the need to find calm again. Kempf (2002) explains that the role of silence in large-scale conflict resolution is often as a means to escalate or de-escalate conflict, or silence can be *misinterpreted* as either. Journalists are often caught up in the struggle and must find within the strength to report items that are difficult to report. Sometimes to remain silent is to allow escalation or to delay information which might aid resolution. Kempf (2002) states that every word spoken or unspoken is often meant as a weapon, and every word heard or not heard is often interpreted as a weapon. Yet, periods of silence might also mean a “cease fire” in the constant barrage of words, too, just as in couples therapy, allowing time for diffusion of chaotic feelings and collective introspection.

Waterman (2012) reports that refraining from stating one's position might prolong the elevation of tensions, or permit entangled parties to find solution in armed conflict when your position is that of a neutral arbiter of conflicts. This type of silence is difficult, because keeping or breaking silence might compromise tenuous situations. Contentions over unexplored resources and their sovereignty continue to

challenge diplomats as they seek ways to resolve potential conflicts in the absence of data regarding the future value of those resources, and silent evidence regarding entitlement.

Time - Silence Conceals

How can silence conceal anything? It can because it tends to cast a shadow on the future, and acts as a lure to bring silent things to the surface. It can because it makes familiar things suddenly unfamiliar. It can because it is an answer that does not respond, and a nearness which is farther away than anything should ever be.

The Shadows Cast by Suspicion and Doubt

Though silence is not a visual thing, the shadow of silence falls upon visible things. The actualized self, described by Maslow (1943), is a constantly changing form, because shadows of doubt fall on the pyramid he described whenever physiological needs, or safety needs, or belonging, or esteem rumble the foundations of that apex, and remind this certain self how uncertain life can be. Maslow's pyramid might be likened to a set of concentric circles the outer boundary of which is the actualized self, and silence like a shadow threatening the inner circles. Needs include the need to know one's future, without which the extended self must ask and know, or withdraw to a lesser self. When the future is silent, even when asked, security is threatened, safety no longer guaranteed. One of the fears from childhood was the fear of darkness, and of shadows moving in that darkness. Silence is such a silent figure, to which we anxiously ask, "*Quo vadis?*" (who goes there?). The steady self requires a friendly reply, after which the vibrations of trust in its future rumble back down to the foundations, calming the more fundamental needs. Silence can be the

instability at work and one's future employment situation (Wooldridge, 1995); silence can be a world that does not seem safe because media events occur which lack explanation, so that every one of us asks . . . "*Quo vadis?*". Silence can be the shape of a future one cannot make out, because the future has been quiet lately.

The Primeval Hunter and Hunted

One aspect of effective silence is when it is used by a *hunter* of something to uncover the *hunted* something. When silence is a "probe," it is like fishing with an invisible lure for an invisible fish. This human habit of "verbal angling" is not unlike the Sargassum frogfish (*hystrio hystrio*) that frequent Sargassum weeds, or the deep sea anglerfish (*melanocetus johnson*) that haunt the depths with bioluminescent lures (Sea and Sky, 2013; Wainwright, 2011). The hunter's lure attracts prey; the prey is fixated on the lure and misses the predator. Like the anglerfish and its hungry prey, human speech exhibits a rhythm of apprehensions which can act as a lure. We could even view silence as the norm instead of speech, and thus view speech as interruption of our normatively continuous silence (Hudson, n.d.; Janniro, 1991). Psychologists often term this directed affective stimulation *cognitive priming* (Storbeck & Clore, 2008).

The silence in interrogation strategy has to do with rhythm in communication between the perpetrator and the interrogator. When the interrogator changes the rhythm by slowing or ceasing the communication, it may result in the perpetrator feeling as though he/she has to fill in the pauses or voids of silence. These gaps in our rhythm are like breaches in a defensive mind, and that mind attempts to fill them before they expose entry to safeguarded secrets. In so doing, the fearful mind is apt to fill those gaps with the very things being protected

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from view (Janniro, 1991). Hopkins (n.d.) notes that the complete absence of a signal is not needed to infer that feedback is expected, simply slowing or manipulating the rhythm of exchange can be a strategic tool. One caveat to this phenomenon is that the simple act of perceiving oneself as “prey” can elevate the same physiological symptoms in innocents as it can in perpetrators (Guyl et al., 2013). Defense mechanisms are not tied to substantiations, apparently, so much as to awareness of a need for substantiations. As in the paradoxical impact of silence which seems to accompany every presence of silence, the absence of explanation can be taken either way.

Unheimlich - The Uncanny Valley

Akin to nonverbal silence, is that uncanny feeling that accompanies multimodal feedback, which does not quite seem congruent. Freud (1919) thought enough of this phenomenon to compose a paper on it, describing the possible origins of this dread that comes over us when what we expect to see is dissonant with what we see. Freud called it *unheimlich*, the uncanny. When something rustles in the room or on the ground that should not or could not rustle, and apparently of its own accord, the human alert system goes to high alert.

Humans have internally scripted expectations of what can and cannot do things, what they should look like, and how they should act (Rumelhart & Ortony, 1977). When things perceived do not match these innate or learned scripts because of multiple conflicting modalities of feedback (vision and expectation, or sound and vision), alarms go off and vigilance is high until this situation is resolved. Grey and Wegner (2012) explored the *uncanny valley* effect first discovered by Mori, wherein human observers observe a robot which is just “too” real, too untrustworthy, and

somehow spooky. They suspect there is a division of vigilance between external agency (the ability to plan and execute behaviors), and experience (the possession of a sensory consciousness like ours). As humans do not trust one another, so too humans do not trust human-like things (Śiva & Vyas, 2007). Humans probably fail to trust primarily because verbal expressions, sounds, are frequently incongruous with nonverbal gestures, vision. These, like a discomfiting silence, suggest internal planning and hidden intent (Gu, Mai, Luo, 2013).

Multiple studies have been conducted with infants that suggest that humans have an innate ability to discern any incongruity between the visual and verbal communication of information (McCartney & Panneton, 2005). This would seem to indicate that this ability is linked to survival instincts that would help to keep the child safe. Lewkowicz and Ghazanfar (2012) posit that infants acquire this capability to detect incongruity developmentally, as a narrowing of focus and discrimination. Weikum, et al. (2007) related that infants can even distinguish the language underlying silent speech. Uncanniness occurs when what seems fully manifest is missing something obvious yet ineffable, when something latent is not quite here. The uncanny is a visual silence in an ocean of sound, or an ocean of visual clues oddly incommensurate with an auditory silence. The missing information wells up inside as a feeling of dread, eager to be seen and heard.

Developmentally Attached to Silence

On the theme of infancy and human development, not so long ago, Bowlby (1988) and colleagues introduced a theory of attachment, to help explain the widespread anxiety and failure to find fit and satisfaction in society. His theory was founded on evidence that the parental failure

to respond synchronously and sufficiently to a child's urgent developmental needs during early nurture, would often result in future impossibility of affective adaptation. The silence that accompanied non-response to desperate cries for affection would become patterned into expectations. Studies of the developmental trajectories of goslings (in the footsteps of Karl Lorenz), brought this possibility to the tragic surface with Feli, a gosling experimentally denied parental affective response during critical developmental epochs (Fischer-Mamblona, 2000). The result was a mature gosling "attached to silence", its sole expectation that its cries would go unheard, and utterly "lacking in the social graces" with an urgent awkwardness reminiscent of poorly attached, human teens (Ian, 1974, track 2).

Silence, whether in the familial environment of employed neglect to try and survive economically while offspring often have to fend for themselves, or in the peer groups and social environments that use the *spiral of silence* to neglect continuing individual diversity of need, silence often becomes the primary attachment (Bowlby, 1988; Scheufele, 2008).

Silence is a response, not a non-response, to the urgent asker of care and comfort. Silence is a loud reply that indicates the non-worth of and apathy toward an adult née an *insecurely attached* child. The conversations that occur or do not occur, invisibly between request and response, fashion or revise affective-bonds, so that an affective creature with a longitudinal experience of silence will learn to hug the silence in lieu of being held.

Bereavement: The Endless Silence that Follows Parting

The last kind of silence we will explore, is the lasting silence that follows the parting of two hearts that once spoke with one voice. Bereavement, in its wake of

intense grief, brings with it an even more intense and uneasy calm. Over the long-abandoned stage, a quieter curtain falls, a veil of silence, a voice of longing so loud the air around the stage trembles with motionless quiet. Suddenly devoid of stimulation, the air is filled with noise from somewhere deep inside us. Luna (2014) called this silence deafening, unnerving, our deepest fear. This silence is the one we have been running from every day, by turning up the volume of everything else so we do not have to hear it, even though it whispers to us everywhere we go. Solitary silence requires that the sole listener do something about it. The more consoled and non-seeking of conversation we were before we became alone, the more inconsolably seeking we will become when we find ourselves suddenly alone (Kübler-Ross & Kessler, 2005).

But even in such a lonely silence, Klass (1993) spoke of *continuing bonds*, the phenomenon of affective feedback that just cannot let go, bonds between persons whose futures were once inseparably entangled. We might think of this endless absence of conversational feedback, like reaching out to hug someone and realizing there's no one there. We might think of this missing reply as a whisper of endearment on the tip of our tongue that catches itself, hushed into tears that issue silently from verbally helpless eyes. It was Ramachandran who brought the phantom limb phenomenon to the world, the bizarre discovery that a lost limb continues to exist at the edge of reason and need, with the mind anxiously, hopelessly awaiting a reply which will never come again (Ramachandran, Rogers-Ramachandran, & Cobb, 1995). Parting is such a phenomenon, an affective phantom severed from the heart. The endless silence that follows parting keeps the lost one near, as unexpected *mirror visual feedback* when we pass a mirror that once reflected his or her form, or

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a voice we thought just called us from the other room. Silence is an absent partner, a heart that still beats nearby, but whose absence is unexplainable to ours.

Conclusion

What is silence? There is a psychology of it. The literature is anything *but* silent on silence, revealing an almost biological entity, that speaks, grows, hurts, and conceals, despite being nothing at all. The absence of sound often makes humans uncomfortable. The verbal world is so dependent on language, that the absence of language, silence, may be the most effective means of communicating almost anything unspecified. This research explored the psychological literature, and found that silence speaks though it says nothing, grows though it has no substance, hurts though it can touch nothing, and conceals though it cannot hide from perception. Though silence consists of nothing in particular, it generates psychological phenomena such as pressure, anxiety, suspicion, isolation, rejection, inner conflict, ambiguity, and agitation. Despite its lack of sound or meaning, the language of silence is spoken by all—and once silence is here, its missing explanation is too absent to ignore.

Silence is *here* when we feel something is *not here* but should be; silence does not go away just because it lacks a reason to stay. Silence is here because “here” is an anxiety we have, not a place or time we happen to occupy. Silence has its own language, its own dictionary, its own idioms, and all of them are deafening. Silence is a semiotic signal, a nonverbal suggestion, the pause before reply, the nod that is not quite right. Silence is a culture, with norms regarding who is affected but not why, a visitor in a darkness who smiles silently when we ask, “Who goes there?” Silence is a forgotten wanderlust, a call from an ancient nature to come home and find

comfort in sounds from earth and wind and leaves and waterfalls eager to hug the disquiet of anxiety away. Silence is an opinion afraid to be heard, where fear of opinion often leads to excommunication from ever being heard. Silence is master and commander of insecure groups of us which steers us safely into silent insecurity. Silence is a crime with no criminal, a testimony with no audience, a barter between secrets themselves. Silence is a silent self, afraid to even *be* itself. Silence is unequivocally ambiguous, unabashedly coy. Silence is a predator of those that hide in silence, the monster in the Id that investigation rouses (Schary & Wilcox, 1956). Silence is so uncanny at times that the dread this emptiness or incongruity describes revives ancient memories of beasts in human guise, resurrected from our supernatural past. Silence is a mother who will not respond to her infant's cries, or an absent womb to cling to when society rejects us. Silence is an absent partner who is still unexplainably here. Silence is something that is *so* missing, it is just *too* absent to ignore, the very absence of explanation, and in the absence of explanation, silence coaxes what remains concealed into the legible, audible light. Whatever it is, no matter why it is here, regardless of this urgency to fill this emptiness, we can never be sure if what we anxiously offered up to this insatiable Silence, is enough for it to hear what it came for, and go oh so loudly away.

References

- Allport, D. A. (1987). Selection for action: Some behavioral and neurophysiological considerations of attention and action. In H. Heuer and A. F. Sanders (Eds), *Perspectives on Perception and Action*, (pp. 395-419). Hillsdale, NJ: Erlbaum.

- Andrews, R. G. (2013, September 4). Nietzsche's butterfly: An introduction to chaos theory. *Scitable: Student Voices*. Retrieved from <http://www.nature.com/scitable/blog/student-voices/nietzsches-butterfly-an-introduction-to>
- Bauer, J. (2008). Buying witness silence: Evidence-suppressing settlements and lawyers' ethics. *Oregon Law Review*, 87, 481-574. Retrieved from <http://law.uoregon.edu/org/olrold/archives/87/bauer.pdf>
- Berkeley, G. (1979). *Three dialogues between Hylas and Philonous* [Kindle ed.]. Indianapolis, IN: Hackett Publishing.
- Biro, D., & Biro, D. (2011). *Listening to pain: Finding words, compassion, and relief*. New York: W. W. Norton & Co.
- Bowlby, J. (1988). Developmental psychiatry comes of age. *The American Journal of Psychiatry*, 145(1). Retrieved from <https://library.gcu.edu:2443/login?url=http://search.proquest.com.library.gcu.edu:2048/docview/220490225?accountid=7374>
- Bradbury, R., Leialoha, S., Woods, L., & Woods, W. (2002). *The Ray Bradbury chronicles*. New York: Childrens eLibrary.
- Bum Jin, P., Tsunetsugu, Y., Kasetani, T., Kagawa, T., & Miyazaki, Y. (2010). The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): Evidence from field experiments in 24 forests across Japan. *Environmental Health & Preventive Medicine*, 15(1), 18-26. [doi:10.1007/s12199-009-0086-9](https://doi.org/10.1007/s12199-009-0086-9)
- Capps, D. (2011). Speaking of silence. *Pastoral Psychology*, 60, 619-631. [doi:10.1007/s11089-011-0355-6](https://doi.org/10.1007/s11089-011-0355-6)
- Carbaugh, D. A. (1990). *Cultural communication and intercultural contact*. Hillsdale, N.J: L. Erlbaum Associates.
- Carlyle, T. (1997). *Sartor Resartus: The life and opinions of Herr Teufelsdröckh*. Champaign, Ill: Project Gutenberg.
- CarnegieMellonU. (2008, February 6). *Randy Pausch lecture: Time management*. Retrieved from <http://www.youtube.com/watch?v=OTugjssqOT0>
- Chomsky, N. (2007). *On language: Chomsky's classic works Language and Responsibility and Reflections on Language in one volume* [Kindle Ed.]. New York, NY: The New Free Press.
- Clusive. (2014). In *Oxford English Dictionary Online*. Retrieved from <http://www.oed.com.library.gcu.edu:2048/view/Entry/34881?redirectedFrom=clusive#eid>
- Cook, K. (2002). The theory of groupthink applied to Nanking. *Stanford University: Department of Sociology*. <http://www.stanford.edu/~kcook/groupthink.html>
- Coplan, R. J., Hughes, K., Bosacki, S., & Rose-Krasnor, L. (2011). Is silence golden? Elementary school teachers' strategies and beliefs regarding hypothetical shy/quiet and exuberant/talkative children. *Journal of Educational Psychology*, 103(4), 939-951. [doi:10.1037/a0024551](https://doi.org/10.1037/a0024551)
- Craig, A. D. (2008). Interoception and emotion: A neuroanatomical perspective. In M. Lewis, J. M. Haviland-Jones, and L. F. Barrett (Eds.) *Handbook of Emotion* (3rd Ed). New York, NY: Guilford Press.
- Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain*. Orlando, FL: Harcourt.

- Darwin, C. R. (1872). *The expression of the emotions in man and animals*. London, ENG: Albemarle.
- Darwin, C. R. (1876). *The origin of species by means of natural selection, or the preservation of favoured races in the struggle for life* [6th ed, for Kindle]. London, England: John Murray.
- Darwish, M. (2011). *In the presence of absence* (S. Antoon, Trans.). New York, NY: Archipelago.
- Du, Q. & Montiel, M. (2013). *The power of silence in interpersonal communication*. Retrieved from <http://www.slideshare.net/markmontiel/silence-presentation-for-int>
- Ekman, P. (1998). Introduction to the third edition. In Ekman, P. (Ed.), *The Expression of the Emotions in Man and Animal* (3rd ed., pp. xxi-xxxvi). New York: Oxford University Press.
- Elhammoumi, M. (1996). Ape, primitive man and child: Essays in the history of behavior. *Journal of the History of the Behavioral Sciences*, 32(3), 285-287. doi:10.1002/(SICI)1520-6696(199607)32:3<285::AID-JHBS23>3.0.CO;2-L
- Euler, S.S. (2013). *Teaching authentic pronunciation: A connected speech-based approach*. Retrieved from <http://www.sashaseuler.com/conspa.html>
- Fischer, M. (2006). *The mentor as learner: Lessons learned from Howard Gardner and the TV remote control*. Retrieved from http://www.educationworld.com/a_c/urr/voice/voice058.shtml#sthash.RkLQYACI.dpuf
- Fischer-Mamblona, H. (2000). On the evolution of attachment-disordered behaviour. *Attachment & Human Development*, 2(1), 8-21. doi:10.1080/146167300361291
- Fordham, S. (1993). "Those loud black girls": (Black) women, silence, and gender "passing" in the academy. *Anthropology & Education Quarterly*, 24(1), 3-32. Retrieved from http://hstrial-christina-voss-70172.homestead.com/Those_loud_black_girls.pdf
- Frankl, V. E. (2006). *Man's search for meaning*. Boston, MA: Beacon Press.
- Freud, S. (1919). Das unheimliche. In *Imago: Zeitschrift für Anwendung der Psychoanalyse auf die Geisteswissenschaften V*, (pp. 297–324). Vienna, AT: Heller.
- Freud, S. (1920). *A general introduction to psychoanalysis*. New York, NY: Horace Liveright.
- Fromm, E. (2010). *The heart of man*. Riverdale, NY: American Mental Health Foundation Books.
- Fujio, M. (2004). Silence during intercultural communication: A case study. *Corporate Communications*, 9(4), 331-339. doi:10.1108/13563280410564066
- Gans, J. S., & Counselman, E. F. (1999). Silence in group psychotherapy: A powerful communication. *International Journal of Group Psychotherapy*, 50(1). Retrieved from <https://library.gcu.edu:2443/login?url=http://search.proquest.com.library.gcu.edu:2048/docview/194841350?accountid=7374>
- Garland, T. (2013). Polyvagal theory, sensory challenge and gut emotions. *Signs of the Times*. Retrieved from <http://www.sott.net/article/256043-Polyvagal-Theory-Sensory-Challenge-and-Gut-Emotions>
- Garten, A. (2011). *Ariel Garten: Know thyself, with a brain scanner*. Retrieved from

- http://www.ted.com/talks/ariel_garten_know_thyself_with_a_brain_scanner.html
- Gerber, J., & Wheeler, L. (2009). On being rejected: A meta-analysis of experimental research on rejection. *Perspectives on Psychological Science*, 4(5), 468-488. [doi:10.1111/j.1745-6924.2009.01158.x](https://doi.org/10.1111/j.1745-6924.2009.01158.x)
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Grassian, S. (2006). Psychiatric effects of solitary confinement. *The Journal of Law & Policy*, 22, 325-383. Retrieved from <http://law.wustl.edu/journal/22/p325grassian.pdf>
- Grey, K., & Wegner, D.M. (2012). Feeling robots and human zombies: Mind perception and the uncanny valley. *Cognition*, 125, 125–130. Retrieved from <http://dx.doi.org/10.1016/j.cognition.2012.06.007>
- Gu, Y., Mai, X., Luo, Y-j. (2013). Do bodily expressions compete with facial expressions? Time course of integration of emotional signals from the face and the body. *PLoS ONE* 8(7): e66762. [doi:10.1371/journal.pone.0066762](https://doi.org/10.1371/journal.pone.0066762)
- Gütig, R., & Sompolinsky, H. (2009). Time-warp-invariant neuronal processing. *PLoS Biology*, 7(7), e1000141. [doi:10.1371/journal.pbio.1000141](https://doi.org/10.1371/journal.pbio.1000141)
- Gutenschwager, G. (2013). From Epicurus to Maslow: Happiness then and now and the place of the human being in social theory. *Cadmus*, 1(6), 66-90. Retrieved from <http://cadmusjournal.org/>
- Guyll, M., Madon, S., Yueran, Y., Lannin, D., Scherr, K., & Greathouse, S. (2013). Innocence and resisting confession during interrogation: Effects on physiologic activity. *Law & Human Behavior (American Psychological Association)*, 37(5), 366-375. Retrieved from <http://library.gcu.edu:2048/login?url=http://search.ebscohost.com.library.gcu.edu:2048/login.aspx?direct=true&db=ofs&AN=90612863&site=eds-live&scope=site>
- Hadjikhani, N., Kveraga, K., Naik, P., & Ahlfors, S. P. (2009). Early (N170) activation of face-specific cortex by face-like objects. *Neuroreport*, 20(4), 403-407. [doi:10.1097/WNR.0b013e328325a8e1](https://doi.org/10.1097/WNR.0b013e328325a8e1)
- Haikonen, P. O. A. (2009). Qualia and conscious machines. *International Journal of Machine Consciousness*, 1(2), 225. [doi:10.1142/S1793843009000207](https://doi.org/10.1142/S1793843009000207)
- Harold, V., & Hall. (2001). *Detecting malingering and deception: Forensic distortion analysis. Pacific Institute Series on Forensic Psychology*. CRC Press.
- Hauser, M. D. (2005). *The evolution of communication*. Cambridge: MIT Press.
- Heit, M. (1987). Communication styles of Indian peoples. *Awasis—Indian and Native Education Council Journal*, 5(1), March, 10-11. Retrieved from <http://cosmicserpent.org/uploads/downloadables/Communication%20Styles%20of%20Indian%20People.pdf>
- Holzman, L. (2014). *The overweight brain: How our obsession with knowing keeps us from getting smart enough to make a better world*. Retrieved from <http://loisholzman.org/books/latest-installment/>

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- Hopkins, L. (n.d.). *Nonverbal communication - an overview*. Retrieved from <http://leehopkins.com/nonverbal-communication.html>
- Ian, J. (1974). At seventeen. *Between the lines* [Vinyl]. San Francisco, CA: Columbia Records. (1975).
- Imura, T. (2002). A note for MA: Space/time in the garden of Ryoan-Ji. *Millenium Film Journal*, 38. Available at <http://www.mfj-online.org/journalPages/MFJ38/iimura.html>
- INFOM. (2014, March 20). Completion report: "Walking forest therapy roads with a doctor" in 2013. *International Society of Nature and Forest Medicine*. Retrieved from <http://infom.org/news/2014/03/walkingforesttherapyroads.html>
- Jackson, J. M., & Saltzstein, H. D. (1958). The effect of person-group relationships on conformity processes. *The Journal of Abnormal and Social Psychology*, 57(1), 17-24. doi:10.1037/h0048403
- James, W. (1950). *The principles of psychology*. New York: Dover Publications.
- Janniuro, M. J. (1991). *Interview and interrogation*. Retrieved from <https://antipolygraph.org/documents/dodpi-interrogation.pdf>
- Johnston, J. R. (1997, winter). Why is it OK for the prosecution, but not the defense? *Criminal Justice*, 21-24. Retrieved from <http://www.pbs.org/wgbh/pages/frontline/shows/snitch/readings/paying.html>
- Jonsson, K., Grim, K., & Kjellgren, A. (2014). Do highly sensitive persons experience more nonordinary states of consciousness during sensory isolation? *Social Behavior and Personality*, 42(9), 1495-1506. doi:10.2224/sbp.2014.42.9.1495
- Kahn, Jr., P. H., Severson, R. L., & Ruckert, J. H. (2009). The human relation with nature and technological nature. *Current Directions in Psychological Science*, 18(1), 37-42. Retrieved from http://depts.washington.edu/hints/publications/Human_Relation_Technological_Nature.pdf
- Keller, H. (2003). *The story of my life*. New York, NY: W. W. Norton and Company.
- Kempf, W. (2002). Conflict coverage and conflict escalation. In W. Kempf & H. Luostarinen (Eds.) *Journalism and the New World Order. Volume II: Studying war and the media*. Göteborg: Nordicom, 59-72. Retrieved from http://kops.ub.uni-konstanz.de/bitstream/handle/urn:nbn:de:bsz:352-opus-90416/Kempf_2001_Conflict_Coverage.pdf
- Kimmel, M. (1994). Masculinity as homophobia: Fear, shame, and silence in the construction of gender identity. In H. Brod, & M. Kaufman (Eds.), *Research on Men and Masculinities Series: Theorizing masculinities*. (pp. 119-142). Thousand Oaks, CA: SAGE Publications, Inc. doi: <http://dx.doi.org/10.4135/9781452243627.n7>
- King, N. J. (1993). Racial jurymandering: Cancer or cure? A contemporary review of affirmative action in jury selection. *New York University Law Review*, 68(4), 707-776. Available at <http://www.nyulawreview.org>
- Klass, D. (1993). Solace and immortality: Bereaved parents' continuing bond with their children. *Death Studies*, 17(4), 343. Retrieved from

- <http://library.gcu.edu:2048/login?url=http://search.ebscohost.com.library.gcu.edu:2048/login.aspx?direct=true&db=a9h&AN=9310080224&site=eds-live&scope=site>
- Kleiger, J. H. (2012). *Disordered thinking and the Rorschach: Theory, research, and differential diagnosis*. New York: Routledge.
- Kocieniewski, D. (2007, March 1). With witnesses at risk, murder suspects go free. *New York Times*. Retrieved from <http://www.nytimes.com/2007/03/01/nyregion/01witness.html>
- Kocieniewski, D. (2007, November 19). Keeping witnesses off stand to keep them safe. *New York Times*. Retrieved from <http://www.nytimes.com/2007/11/19/nyregion/19witness.html>
- Kocieniewski, D. (2007, December 30). So many crimes, so many reasons not to cooperate. *New York Times*. Retrieved from <http://www.nytimes.com/2007/12/30/nyregion/30witness.html>
- Koltko-Rivera, M. E. (2006). Rediscovering the later version of Maslow's hierarchy of needs: Self-transcendence and opportunities for theory, research, and unification. *Review of General Psychology*, 10(4), 302. doi:10.1037/1089-2680.10.4.302
- Kübler-Ross, E., & Kessler, D. (2005). *On grief and grieving*. New York, NY: Scribner.
- Laozi, & Mitchell, S. (2004). *Tao te ching*. New York: PerfectBound.
- Lee, T. W., Dolan, R. J., & Critchley, H. D. (2008). Controlling emotional expression: Behavioral and neural correlates of non-imitative emotional responses. *Cerebral Cortex*, 18(1), 104–113. doi:10.1093/cercor/bhm035
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. D. Cartwright (Ed.). New York, NY: Harper & Row.
- Lewis, M. G. (1996). Without a word: Teaching beyond women's silence [Review]. *Canadian Journal of Education*, 21(1), 111-115. Retrieved from <https://library.gcu.edu:2443/login?url=http://search.proquest.com.library.gcu.edu:2048/docview/215376165?accountid=7374>
- Lewkowicz, D. J., & Ghazanfar, A. A. (2012). The development of the uncanny valley in infants. *Developmental Psychobiology*, 54(2), 124-132. doi:10.1002/dev.20583
- Lin, D. (n.d.). *What is Zen?* Retrieved from http://www.taoism.net/articles/what_zen.htm
- Luna, A. (2014). *Why is silence deafening?* Retrieved from <http://lonerwolf.com/why-silence-is-deafening/>
- Manassis, K., Tannock, R., Garland, E. J., Minde, K., & Clark, S. (2007). The sounds of silence: Language, cognition and anxiety in selective mutism. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(9), 1187–1195. doi:http://dx.doi.org/10.1097/CHI.0b013e318076b7ab
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, pp. 370. Retrieved from <http://psychclassics.yorku.ca/Maslow/motivation.htm>
- McCartney, J. S., & Panneton, R. (2005). Four-month-olds' discrimination of voice changes in multimodal displays as a function of

- discrimination protocol. *Infancy*, 7(2), 163-182.
[doi:10.1207/s15327078in0702_3](https://doi.org/10.1207/s15327078in0702_3)
- McCull, F. (2012). *Silence as a defense, silence as a weapon*. Retrieved from <http://estrangedfamilies.wordpress.com/2012/01/19/silence-as-a-defence-silence-as-a-weapon/>
- Mehrabian, A. (1981). *Silent messages: Implicit communication of emotions and attitudes*. Belmont, CA: Wadsworth Publishing.
- Mehrabian, A., & Ferris, S. R. (1967). Inference of attitudes from nonverbal communication in two channels. *Journal of Consulting Psychology*, 31(3), 248-252.
[doi:10.1037/h0024648](https://doi.org/10.1037/h0024648)
- Mulford, P. (2011). *Thoughts are things* [Kindle ed.]. New York, NY: United Holdings Group.
- O'Grady, M. A. (2013, February 22). *The pachyderm in the parlor*. Retrieved from <http://thepachydermintheparlor.blogspot.com/2013/02/the-pachyderm-in-parlor-is-close.html>
- Panksepp, J. (2010). Affective neuroscience of the emotional BrainMind: Evolutionary perspectives and implications for understanding depression. *Dialogues in Clinical Neuroscience*, 12(4), 533-545. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181986/>
- Pilgrim, R. B. (1986). Intervals (Ma) in space and time: Foundations for a religio-aesthetic paradigm in Japan. *History of Religions*, 25(3), 255-277. Retrieved from <http://www.jstor.org/stable/1062515>
- Quinn, R. J., Lamberg, T. D., & Perrin, J. R. (2008). Teacher perceptions of division by zero. *Clearing House*, 81(3), 101-104. Retrieved from <http://library.gcu.edu:2048/login?url=http://search.ebscohost.com.library.gcu.edu:2048/login.aspx?direct=true&db=ehh&AN=29346393&site=eds-live&scope=site>
- Rieber, R. (1983). The psychology of language and thought: Noam Chomsky interviewed by Robert W. Rieber. In Robert W. Rieber (ed.), *Dialogues on the Psychology of Language and Thought*, New York, NY: Plenum Press.
- Riess, H, Kelley, J. M., Bailey, R. W., Dunn, E. J., & Phillips, M. (2012). Empathy training for resident physicians: A randomized controlled trial of a neuroscience-informed curriculum. *Journal of General Internal Medicine*, 27(10), 1280-1286. [doi:10.1007/s11606-012-2063-z](https://doi.org/10.1007/s11606-012-2063-z)
- Rogers, C. R. (1961). *On becoming a person*. Boston, MA: Houghton Mifflin.
- Rüedi-Bettschen, D., Zhang, W., Russig, H., Ferger, B., Weston, A., Pedersen, E., & ... Pryce, C. R. (2006). Early deprivation leads to altered behavioural, autonomic and endocrine responses to environmental challenge in adult Fischer rats. *European Journal of Neuroscience*, 24(10), 2879-2893. [doi:10.1111/j.1460-9568.2006.05158.x](https://doi.org/10.1111/j.1460-9568.2006.05158.x)
- Rumelhart, D. E., & Ortony, A. (1977). The representation of knowledge in memory. In R. C. Anderson, R. J. Spiro & W. E. Montague (Eds.), *Schooling and the acquisition of knowledge*. Hillsdale, NJ: Erlbaum.
- Schary, D. (Producer), & Wilcox, F. M. (Director). (1956). *Forbidden planet* [Motion picture]. United States: Metro Goldwyn Mayer.

- Scheufele, D. A. (2008). Spiral of silence theory. In W. Donsbach & M. W. Traugott (Eds.) *The SAGE Handbook of Public Opinion Research*. London, ENG: Sage Publications.
- SciTechDaily. (2013, May 30). *New Mathematical model links negatively curved space-time and flat space-time*. Retrieved from <http://scitechdaily.com/new-mathematical-model-links-negatively-curved-space-time-and-flat-space-time/>
- Sea and Sky. (2013). *The deep sea anglerfish*. Retrieved from <http://www.seasky.org/deep-sea/anglerfish.html>
- Seligman, M. E. P. (1967). *The disruptive effects of unpredictable shock*. (Unpublished doctoral dissertation). University of Pennsylvania, Pennsylvania.
- SheKnows. (2014). *The active role of silence*. Retrieved from <http://www.sheknows.com/love-and-sex/articles/6775/the-active-role-of-silence>
- Shinrin-yoku. (2014). *Shinrin-yoku: The medicine of being in the forest*. Retrieved from <http://www.shinrin-yoku.org/>
- Śiva, K., & Vyas, A. (2007). *Stories from panchatantra*. New Delhi: Children's Book Trust.
- Sidransky, R. (2006). *In silence: Growing up hearing in a deaf world*. Washington, D.C: Gallaudet University Press.
- Storbeck, J., & Clore, G. L. (2008). The affective regulation of cognitive priming. *Emotion*, 8(2), 208-215. [doi:10.1037/1528-3542.8.2.208](https://doi.org/10.1037/1528-3542.8.2.208)
- Strauss, C. (2004). Cultural standing in expression of opinion. *Language in Society*, 33(2), 161-194. [doi:10.1017/S004740450433201X](https://doi.org/10.1017/S004740450433201X)
- Swami, S. (2013, July). *Recognizing emotional expressions: Scientific viewpoints*. Retrieved from <http://www.nonverbal-world.com/2013/07/scientific-viewpoints-of-recognizing-emotional-expressions.html>
- Tsakiris, M., Longo, M. R., & Haggard, P. (2010). Having a body versus moving your body: Neural signatures of agency and body-ownership. *Neuropsychologia*, 48(9), 2740-2749. [doi:10.1016/j.neuropsychologia.2010.05.021](https://doi.org/10.1016/j.neuropsychologia.2010.05.021)
- Verhezen, P. (2010). Giving voice in a culture of silence. From a culture of compliance to a culture of integrity. *Journal of Business Ethics*, 96(2), 187-206. [doi:10.1007/s10551-010-0458-5](https://doi.org/10.1007/s10551-010-0458-5)
- Vygotsky, L. S., Luria, A. R., & Rossiter, E. (1992). *Ape, primitive man, and child: Essays in the history of behavior*. New York: Harvester Wheatsheaf.
- Wagner, D. (2009). If mathematics is a language, how do you swear in it? *Montana Mathematics Enthusiast*, 6(3), 449-457. Retrieved from [http://library.gcu.edu:2048/login?url=http://search.ebscohost.com.library.gcu.edu:2048/login.aspx?direct=true&db=a9h&AN=43611647&site=eds-live&scope=site](http://library.gcu.edu:2048/login?url=http://search.ebscohost.com/library.gcu.edu:2048/login.aspx?direct=true&db=a9h&AN=43611647&site=eds-live&scope=site)
- Wainwright, P. (2011). Waiting in the weeds: The Sargassum frogfish (*Histrio histrio*). *Wainwright Lab: University of California at Davis*. Retrieved from <http://fishlab.ucdavis.edu/?p=199>
- Waterman, S. (2012, December 6). U.S. silence over island dispute risks escalation in East China Sea, analysts say. *Washington Times*. Retrieved from

Silence: Because what's missing is too absent to ignore

<http://www.washingtontimes.com/news/2012/dec/6/us-silence-over-island-dispute-risks-escalation-in/?page=all>

<http://www.livescience.com/25448-pareidolia.html>

- Weikum, W. M., Vouloumanos, A., Navarra, J., Soto-Faraco, S., Sebastián-Gallés, N., & Werker, J. F. (2007). Visual language discrimination in infancy. *Science*, 316(5828), 1159. Retrieved from <http://www.sciencemag.org/content/316/5828/1159>
- Weisstein, E. W. (2015). Division by zero. In *MathWorld--A Wolfram Web Resource*. Retrieved from <http://mathworld.wolfram.com/DivisionbyZero.html>
- Wittig, A. (2001). *Schaum's outlines: Introduction to psychology* (2nd ed.). New York: McGraw-Hill.
- Wooldridge, E. (1995). Time to stand Maslow's hierarchy on its head? *People Management*, 117. Retrieved from <http://library.gcu.edu:2048/login?url=http://search.ebscohost.com.library.gcu.edu:2048/login.aspx?direct=true&db=ofs&AN=510388154&site=eds-live&scope=site>
- Zadro, L. (2013, February). Silent treatment: Uncovering the nature and consequences of ostracism. *APS Observer*, 26(2). Retrieved from <http://www.psychologicalscience.org/index.php/publications/observer/2013/february-13/silent-treatment.html>
- Zilcosky, J. (2004). The writer as nomad? The art of getting lost. *Interventions* 6(2), 229-41. Available at <http://www.tandfonline.com/doi/abs/10.1080/1369801042000238355#.VLlPaXsnSM4>
- Zimmerman, K. A. (2012). *Pareidolia: Seeing faces in unusual places*. Retrieved from