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# AND SYMBOLIC ACTIVITY

Volume 9, Number 1		
Pictorial Metaphor in Advertisements Charles Forceville	1	
Aerating the Mind: The Metaphor of Mental Functioning as Bodily Functioning Steven A. Fesmire	31	
Visual Puns as Interactive Illustrations: Their Effects on Recognition Memory Farough Abed	45	
METAPHORICAL ISSUES The Thesis That All Knowledge Is Metaphorical and Meanings of Metaphor Bipin Indurkhya	61	
BOOK REVIEWS Metaphor and Reason in Judicial Opinions, by Haig Bosmajian Reviewed by Michael J. Johnson	75	
Metaphor: The Logic of Poetry, by John Briggs and Richard Monaco Reviewed by James W. Manns	81	

## Aerating the Mind: The Metaphor of Mental Functioning As Bodily Functioning

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Recent advances in the cognitive sciences suggest that cognition is grounded in our embodied experience. This article supports this claim by analyzing the way we conceptualize our emotions metaphorically in terms of bodily processes. Our emotions are not merely matters of subjective feeling. Rather, emotions have stable conceptual structures that have emerged from our embodied activity through metaphorical projections, structures that are shared in a culture and can be disclosed by empirical inquiry. This article explores the metaphorical structuring of anxiety in terms of our experience of breathing. The correlation in our experience between mental functioning and bodily functioning, which leads to the emergence of metaphorical understanding, is of special concern. The article elaborates on how features of our experience of inhibited breathing map onto our experience of mental disquietude. The analysis draws primarily from Johnson (1987), Lakoff (1987), Lakoff and Johnson (1980), and Reddy (1979) and borrows insight from James and Perls.

Philosophers have traditionally severed cognition from our emotional lives along the lines of a split between the mind and the body. Nevertheless, the body of evidence emerging from the field of cognitive semantics<sup>1</sup> argues for the embodiment of cognition: that our bodily experience, far from being peripheral

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<sup>&#</sup>x27;The first issue of the Cognitive Linguistics journal offers concise statements of the goals and purposes of cognitive linguistics. In his editorial statement, Geeraerts (1990) summed up the cognitive linguist's methodology: "The formal structures of language are studied not as if they were autonomous, but as reflections of general conceptual organization, categorization principles, processing mechanisms, and experiential and environmental influences" (p. 1). Lakoff's (1990) contribution to the issue, "The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas?" gives a lucid explanation of the project.

32

to cognition, structures our cognitive activity. Image schemata, categorization, metaphor, metonomy, and narrative structure are among the phenomena through which the embodied mind (or "minded body") adjusts to its changing environment. Metaphor and metonomy are the focus here. Cognitive semantics shows that metaphor is central to our capacity for understanding and that metaphorical structure is grounded in bodily experience.

There is a vast metaphoric system that grounds our conceptions of mind and reasoning, whereby mental phenomena are understood in terms of bodily phenomena. Sweetser (1984) named this the "MIND AS BODY" metaphor, observing that there is a "general tendency to borrow concepts and vocabulary from the more accessible physical and social world to refer to the less accessible worlds of reasoning, emotion, and conversational structure" (p. 26). Sweetser's analyses suggest that, far from being irrelevant to "abstract reasoning," patterns of our bodily experience actually structure our cognition.

I investigate the emergence of the "MIND AS BODY" metaphor (or more specifically its submetaphor, "MENTAL FUNCTIONING IS BODILY FUNCTIONING") through an analysis of one concrete example of our conceptualization of emotions. I explore how our understanding of anxiety is structured in terms of our experience of inhibited breathing. The primary focus is on distinctively physiological processes, although this by no means precludes nonphysical bases for our metaphorical understanding of emotions. Furthermore, the article is intended to support, through a series of testable hypotheses, the thesis of most interpretations of cognitive semantics that the grounding of metaphor in embodied activity is basic to our cognition. (The terms body and bodily are used here to emphasize our physiological body, although this should not be understood to entail a reduction of our bodily interactions with environing conditions to the merely physiological.)

## METONOMY AND METAPHORICAL PROJECTIONS IN OUR CONCEPTUALIZATION OF EMOTIONS

Emotions are often thought to be matters of subjective feeling only, lacking conceptual content. That is, no stable and shared structures are thought to exist through which we cognize our emotions, no structures that can be disclosed by empirical inquiry. (See Ortony, Clore, & Foss, 1987, for evidence that the prototype or "folk model" of emotion is that of a mental feeling, opposed to cognition, and therefore inappropriate to a discussion of our conceptual schemes.) Nevertheless, we not only feel emotions, we also seek to understand, organize, and reason about these feelings. Furthermore, "when we act on our emotions, we act not only on the basis of feeling but also on the basis of that understanding" (Lakoff, 1987, p. 377). Isolating

emotions from human reason leaves us with an impoverished, one-dimensional view. From a neurophysiological perspective, it is mistaken to claim that our higher mental functions are exempt from "disruptive" emotions. For example, the root of much of our higher cognitive functions, the neocortex, is a source of some emotional experience through excitement of the hypothalamus (Gellhorn & Loofbourrow, 1963, p. 77; Izard, 1972).

Over time, certain structures for understanding and organizing our feelings evolve. These patterns of interpretation are embedded in a social context, and they constrain and direct the way we give meaningful form to our feelings. To see what is involved here, consider Lakoff's (1987) detailed study of the conceptual structure of anger. He showed that the conventionalized (folk) understanding of the physiological accompaniments of anger has led to a system of metonymies in which "the physiological effects of an emotion stand for the emotion" (Lakoff, 1987, p. 382; cf. Kovecses, 1988). These metonymical structures, in turn, give rise to metaphorical projections. For example, body heat is the source of a metonomy for anger, as evidenced by the expressions "Don't get hot under the collar" and "They were having a heated argument" (p. 382). Interference with accurate perception has also come to stand for anger, as with: "She was blind with rage" (p. 383).

The metonomy of body heat for felt anger forms the basis of the most general metaphor for anger, "ANGER IS HEAT." One version of the metaphor involves understanding anger as the heat of a fluid in a container, as in: "You make my blood boil," "Simmer down," and "I had reached the boiling point" (p. 383). Our knowledge of heated fluids in containers is projected onto and structures our understanding of anger and, therefore, structures our inferences about anger. We know, for example, "that intense heat produces steam and creates pressure on the container" (p. 385). Expressions such as "She got all steamed up" and "Billy's just blowing off steam" are metaphorical entailments of our knowledge about steam production. Meanwhile, our knowledge about pressure yields such expressions as, "He was bursting with anger" and "I could barely contain my rage." If the intensity of the anger increases too much, the result is inevitable: "When I told him, he just exploded" (p. 385).

Lakoff's (1987) study suggests that we understand our emotions through metonymic and metaphorical structures that "emerge from our living, embodied encounter with the world" (Alexander, 1992, p. 99). Consider the following emotions that are conceptualized metonymically, each in terms of one of its physiological accompaniments: When I am confronted by racism it "makes my stomach turn." One of our conceptions of disgust is grounded in this bodily sensation, just as the heat of anger can ground our conception of anger. In both examples, the bodily is immanent in the mental. Meanwhile, fear "sends a chill down my spine" and makes me "tremble with fear." Lust makes us "burn with desire." The swallowing that accompanies embarrass-

ment makes us admit to "swallowing our pride." In fact, our language about each of these emotions involves a conventionalized selective emphasis on one or more of the prominent (folk) physiological accompaniments of the emotion.

Consider some metaphors commonly associated with our experience of anxiety and their relation to disturbances in our physiological systems: the respiratory system ("I'm suffocating"), the circulatory system—especially cerebral blood flow ("His head was pounding," "Her heart was racing"), the somato-sensory system ("She sweated through the ordeal"), the digestive system ("He was wrenching with anxiety," "I'm all in knots"), and the skeletal system ("I was weak in the knees"). Note that these systems, far from being isolated from each other, are interlaced. In the experience of anxiety, for example, an increase in cerebral blood flow corresponds to fluctuations in respiration (Mathew & Wilson, 1990). Furthermore, a physiological system may be the source domain for understanding more than one emotion so that the same metaphorical language might be used to describe different emotions. In addition to these more common physiologically based metaphors, there are other metaphors for anxiety that do not appear to be grounded in a physiological system (e.g., "I think I'm going nuts," "I'm going out of my mind," "I'm coming unraveled," and "I'm coming unglued").

For the most part, our understanding of emotions is grounded in the physiological processes that are conventionally thought to be found with those emotions. Therefore, the examples previously discussed supply evidence of an experiential correlation between bodily experiences and their mental counterparts (i.e., between the physiological accompaniments of emotions and our attempt to understand, organize, and reason about our emotions).

#### ANXIETY AS INHIBITED BREATHING

As an extended case, consider the way our understanding and experience of mental disquietude (anxiety or tension broadly conceived) is partially structured ("partially" because there are many other metaphors for anxiety) by our experience of constricted breathing. The conceptual metaphor is "MEN-TAL DISQUIETUDE IS INHIBITED BREATHING," in which we understand one domain of experience, mental disquietude, in terms of part of our (nonmetaphoric) understanding of another domain, inhibited breathing. For example:

- "Mary choked on the test."
- "Now that the ordeal is over, he can breathe easy."
- "Awaiting the test results, she was breathless with anticipation."
- "I need some breathing room."
- "He went to get some air."
- "I had to take a breather."
- "Well, that's a breath of fresh air!"
- "I'm all choked up."

This particular bodily based metaphor for anxiety was chosen because it is the most psychologically significant understanding of anxiety that we have. The close relation between breathing and anxiety is well established in psychological literature (almost 100 studies have been published in the last decade). However, the breathing-anxiety relation is still being studied almost exclusively from the standpoint of breathing therapy and retraining, with no effort to explore the deeper, experiential pairing between breathing and anxiety.

Nevertheless, there is a strong experiential grounding for this metaphor. The close relation between inhibited breathing and anxiety is commonplace in Gestalt psychology, for example, in which it has been thought (overzealously, perhaps) to be anxiety's "essence." Perls, Heffertine, and Goodman (1951) argued that: "Suppression of excitement produces the breathing difficulty which is anxiety" (p. 118). According to Perls, the root of anxiety is "a very simple psychosomatic event. Anxiety is the experience of breathing difficulty during any blocked excitement" (p. 128). Perls theorized anxiety as caused by the unhealthy suppressing of our need to increase breathing rate and amplitude during times of excitement, primarily in an attempt "to create the illusion for himself and others of being unmoved, of remaining 'calm and collected,' self-controlled" (p. 128).

Perls et al. (1951) contended that anxiety develops in all cases in which an organism undergoes oxygen deprivation. Such deprivation, he observed, is culturally conditioned. For example, whereas fearful situations are common and normal, "in our society [italics added] no 'strong' person wishes to reveal fear by panting or gasping, and this establishes the close connection between fear and anxiety" (p. 129).

The emotion of anger is also culturally conditioned. We learn to hold our breath when angry. This serves the function of "denying the excitement its fuel, oxygen, and also choking back what would be expressed if one permitted free exhalation" (p. 130). Even an upcoming pleasant event may give rise to anxiety—"when, for example, we say we are "breathless with anticipation." The anxiety occurs when we try to rein in the excitement within the limits of decorum" (p. 129). Freud calls this instinct anxiety, caused by constricting an organism's necessary functions. Perls concluded that "the

<sup>&</sup>quot;She was choking with anxiety."

<sup>&</sup>quot;His job was suffocating him."

anxiety, the excitement which was suddenly muscularly dammed up, continues to shake for a long time, till one can *breathe freely* [italics added] again" (p. 410).

David Levin (1987) likewise observed that "in an atmosphere of intense anxiety, breathing may become extremely difficult, and possibly painful, threatening our very survival" (p. 131). Because of this prominent experiential correlation between anxiety and inhibited breathing, this specific bodily based metaphor for conceptualizing anxiety, "MENTAL DISQUIETUDE IS INHIBITED BREATHING," is more psychologically significant than other bodily based metaphors for anxiety.

#### BREATHING AND CONSCIOUSNESS

Another reason for emphasizing the "INHIBITED BREATHING" metaphor for anxiety over others is that the phenomenon of breathing has metaphorically structured Eastern and Western understandings of consciousness for thousands of years. For example, consider the following statement by James. Although he makes no formal argument to this effect, James (1904) thought our experience of breathing to be the origin of the treatment of consciousness as an entity:

I am as confident as I am of anything that, in myself, the stream of thinking . . . is only a careless name for what, when scrutinized, reveals itself to consist chiefly of the stream of my breathing. . . . Breath, which was ever the original of 'spirit' . . . is, I am persuaded, the essence out of which philosophers have constructed the entity known to them as consciousness. (p. 183)

Hence, James sees our concept of consciousness as structured metaphorically by our experience of breathing.

On first sight, James's contention may seem nonsensical, but he is simply stating a centuries-old fact about our metaphorical understanding of mind. The words mind, soul, breath, and wind are very closely related. The Greek term psyche literally means "breath" or "wind," but metaphorically it means "spirit," "soul," or "mind." The Greek pneuma (the Stoic World Soul that gives form to the psyche), the Latin spiritus and anima, and the Hebrew ruach (the spirit, breath, or breeze that moves over the waters in Genesis and breathed life into humanity) have similar significations. The Sanskrit prana means "the incoming air," but it also means "life" and "vital breath." It is the "body" of Brahman and the animator of our bodies. Many other languages, even wholly unrelated ones like Japanese and Arabic, share what I call the "MENTAL FUNCTIONING IS BREATHING" metaphor (see Abrams, 1984).

Romantic poetry offers a vivid portrait of how mental functioning has

been understood in terms of the bodily function of breathing (see Abrams, 1984). A brief analysis, in the spirit of Turner's (1991) work on metaphor analyses in literary criticism, will be helpful. The Latin *spiritus*, from which we derive "inspiration" and "respiration," meant "wind," "breath," or "soul." Therefore, to be "inspired" is to be "breathed into" by a spiritual force. The metaphorical structure can be understood as involving the "minor" framework of Reddy's conduit metaphor (Reddy, 1979), in which ideas are objects allowed "to flow [italics added], unfettered and completely disembodied, into a kind of ambient space between human heads" (p. 291).

In Wordsworth's (1850/1982) *Prelude*, Book 1, for example, ideas are objects flowing from "the sweet breath of heaven" (Divine Mind) to a "correspondent breeze" (the mind of the poet). Wordsworth, in describing his inspiration (i.e., his experience of being "breathed into" by the Holy Spirit), records that he was "singled out" for "holy services"—"poetic numbers [poetic ideas] came/Spontaneously, to clothe in priestly robe" (v. 33–54, p. 250). Ideas are breathed from the Holy Spirit, flow through an ambient space (in this case within the artist, from the noumenal to the phenomenal realm), and are clothed, to whatever small extent possible, in words by the "elected" poet. Nature plays through the artist, just as the wind plays through chimes. The poetic mind is an "aeolian harp" (after Aeolus, god of winds) playing Nature's music. Shelley's (1820/1982) "West Wind, thou breath of Autumn's being" (p. 696) is a more naturalistic version of this model of inspiration.

The metaphor for anxiety being explored, therefore, has significance beyond the secondary project of fleshing out one of many bodily based metaphors for anxiety. The analysis taps into a general cognitive model for both anxiety and consciousness: "MENTAL FUNCTIONING IS BREATH-ING." "MENTAL DISQUIETUDE IS INHIBITED BREATHING" is a submetaphor of "MENTAL FUNCTIONING IS BREATHING." Thus, when inspiration has again been breathed into his formerly anguished, sterile soul, Wordsworth declares, "I breathe again" (v. 18, p. 229).

If mental functioning is breathing, then inhibited breathing is, metaphorically, inhibited mental functioning. Even more important in our culture, however, is that there is a certain model of mental functioning implicit in conceptualizing the mind in terms of breath. This model involves the flow of ideas in the mind, as conceived along the lines of Reddy's conduit metaphor.

# ANALYSIS OF THE METAPHOR: THE EMERGENCE OF METAPHORICAL UNDERSTANDING

We all share the bodily experience of breathing with its accompanying constrictions and ambient conditions. Consider the following three cases of mental disquietude that, when taken together, show how we move from the bodily connection between physical constriction of our breathing and the

anxiety that this produces to the metaphorical construction of anxiety as inhibited breathing.

## **Actual Constricted Breathing**

Whenever our breathing is inhibited, we experience tremendous anxiety. Consider the experience of food or drink "going down the wrong way":

I cough and feel pressure in my upper body—head, throat, and chest. I am emotionally overwhelmed and a bit light-headed. I clutch my chest and loosen my collar. Meanwhile, my eyes are watering and my face is contorted. The longer this inability to breathe persists, the greater my anxiety grows. I strain to restore normal breathing and gasp in air at the first possible moment, acutely aware of the ambience which has been partially restored. When I then say, "Whew! I can breathe again," I am asserting a fact about my physical functioning.

## Constricted Breathing Stemming From Anxiety

Now consider a second case in which I might also say, "Whew! I can breathe again," though this time following a period of anxiety. Although "breath" is used here in an extended sense to cover mental functioning, some of the physical symptoms mentioned beforehand still apply. In his Principles of Psychology, James (1890) offered insight into this mental-physical connection—the bodily basis for a metaphorical projection from our experience of breathing onto feelings of disquietude:

My glottis is like a sensitive valve, intercepting my breath instantaneously at every mental hesitation or felt aversion to the objects of my thought, and as quickly opening, to let the air pass through my throat and nose, the moment the repugnance is overcome. (Vol. 1, p. 301)

For example, before someone I love is released from surgery I may be: "breathless with anticipation" or "choking with anxiety." The "air" may be "thick," leading me to loosen my collar and ask for "some breathing room." Perhaps I am even "suffocating" and have to "go get some air" or "take a breather." But "a breath of fresh air" makes it possible for me to "breathe easy."

(Note that the words anguish, anxious, and anxiety come from the Latin words angere, to choke, and angustia, narrowness.) Therefore, we see a

correlation in our experience between breathing and feelings of disquietude—between the body and the mind.

# Anxiety Conceived Metaphorically as Constricted Breathing

Moreover, the conceptual metaphor can be extended even further to situations in which there is no apparent physiological correlation, that is, where no actual inhibition to breathing occurs. For example, you might "suffocate" through a long meeting and need to "get a breath of fresh air." In suggesting that you suffocated, you are not talking about your physical functioning. You are saying something about your mental functioning, that your cognitive abilities were cut off.

Note that conceiving of an event as suffocating will affect behavior, quite possibly leading even a person suffering no apparent physical distress to seek fresh air. Reflecting Dewey's (1922/1988) theory of deliberation as "dramatic rehearsal," Johnson (1993) has recently argued that metaphor is "the locus of our imaginative exploration of possibilities for action" (p. 35). That is, possible alternative courses of action emerge for us because the metaphor(s) through which we conceptualize a problematic situation lends itself to these possibilities. For example, what if I understood anxiety as something that hunted me down and stalked me as prey? Instead of attempting to restore normal functioning by "getting a breath of fresh air," if I were being stalked, the sensible response would be to flee the cause of anxiety, or else to fight it. Hence, the possible courses we have for action are deeply constrained and directed by the metaphors through which we live.

As we move from actual constricted breathing to anxiety conceived metaphorically as constricted breathing, we notice how a metaphor for a mental state can be grounded in bodily experience, even though the metaphorical understanding may have no bodily manifestations or accompaniments. In the example about food going down the wrong way, bodily distress (and a felt anxiety) is caused by actual physical constriction that results in loss of breath, in which the constriction is not a result of mental disquietude.

In the example about anguish in a hospital waiting room, an actual constriction of air is experienced as accompanying an experience of anxiety. This time, however, the constriction is a result of anxiety—an emotion that may have loss of breath (also hyperventilation) as a physiological accompaniment. In this example, we find an *experiential pairing* of inhibited breathing with mental disquietude. This correlation gives rise to the conceptual metaphor by way of a metonomy. Inhibited breathing is frequently found with anxiety in our shared experience, motivating inhibited breathing to stand for

anxiety, forming the basis for a metaphorical projection.

What is most interesting is that the meaning of this type of utterance is highly indeterminate. For example, if I say during a bout of mental distress, "I'm all choked up" while overtly suffering from loss of breath, it is not clear whether I am speaking metaphorically or asserting something about an actual physical constriction. This experiential correlation between bodily functioning and mental functioning therefore illuminates the emergence of metaphorical understanding that is grounded in bodily experience.

Finally, in the example about "suffocating" during a meeting there is neither any apparent physical constriction of breathing nor any apparent emotional distress. This is an explicitly metaphorical case. The metaphor that maps mental disquietude to physical disquietude has clearly emerged.

In our everyday understanding, the experiential basis from which our metaphorical understanding emerges is not obvious, leading many to think that human rationality somehow transcends our embodied experience. On the contrary, the previous examples suggest that we can speak of our understanding of an emotion as being on a continuum that runs from the emotion's physiological dimension to its cognitive dimension. The terms physiological and cognitive are therefore employed only as functional or teleological distinctions (as opposed to ontological or epistemological distinctions) to emphasize for practical purposes the flesh and blood aspect of "bodily" experience or the understanding aspect of "mental" experience.

The use of linguistic expressions like "suffocating" or "choking" with anxiety is not arbitrary. "If metaphors were just linguistic expressions, we would expect different linguistic expressions to be different metaphors" (Lakoff, 1990, p. 49). Hence, "He needed a breath of fresh air," "The job was suffocating." and "She choked on the exam" would constitute three substantially different metaphors. However, we are dealing with only one systematic conceptual metaphor. "It is a unified way of conceptualizing [disquietude] metaphorically that is realized in many different linguistic expressions" (p. 49). Metaphor is "not a figure of speech, but a mode of thought" (p. 50). Therefore, contrary to the prevailing folk theory of emotions, a study of the metaphors for emotions gives evidence that they are not just matters of subjective feeling. They have a conceptual content that allows us to see why someone who is suffocating with anxiety probably needs to get a breath of fresh air, and why someone in anguish cannot breathe freely. Also, as shown, the conceptual metaphor "MENTAL DISQUIETUDE IS INHIBITED BREATHING" is grounded in our bodily functioning, suggesting that metaphors are given direction (constrained) by the experience from which they evolved. Our bodily experience structures the metaphors, and the metaphors give meaningful form to our bodily experience.

## THE METAPHORICAL MAPPING OF ANXIETY AS INHIBITED BREATHING

What background structure is operative when we conceptualize a job or relationship as "suffocating" or when we "choke" on an exam? What metaphorical mapping underlies Dostoevsky's (1866/1987) description in Crime And Punishment of the anguish of the murderer Raskolnikov?

Yes, a means of escape had come! It had been too stifling, too cramping, the burden had been too agonising. A lethargy had come upon him at times. From the moment of the scene with Nikolay at Porfiry's he had been suffocating, penned in without hope of escape. (p. 384)

This metaphorical mapping involves a very general mapping of the conceptual metaphor "MENTAL FUNCTIONING IS BODILY FUNCTIONING," a submetaphor of "THE MIND IS THE BODY." In order to see the mapping, "MENTAL DISQUIETUDE IS INHIBITED BREATHING" must be seen as a specific instance of the generic metaphor "MENTAL FUNCTIONING IS BREATHING."

The basic ontological correspondences are as follows:

Breathing	Mental Functioning
Flow of air —	Flow of ideas
Constricted air flow—	>Disrupted flow of
	ideas
Inhibited breathing ——	
Restored air flow	-> Revived free flow of
	ideas

The model of mental functioning implied in understanding the mind in terms of breath involves, in our culture, the flow of ideas in the mind. As has been observed, the Romantic model of inspiration involves a breath or wind that breathes poetic ideas into the previously sedentary mind of a poet who "clothes" the ideas "in priestly robe." This model presupposes a metaphorical understanding of ideas as objects that can flow just as breath flows. Metaphors involving the flow of ideas continue to flourish in our culture, as Reddy showed in "The Conduit Metaphor."

Reddy (1979) identified two frameworks of the conduit metaphor. The major framework, he contended, sees human minds and words as containers for ideas, thoughts, or feelings. Language acts as a conduit enabling these thoughts and feelings to be transferred between individuals (e.g., "Keep that thought *in* mind," "Put your thoughts *into* words," "Your words *carry* no meaning"). The minor framework, however, "allows ideas and feelings to

flow [italics added], unfettered and completely disembodied, into a kind of ambient space between human heads" (p. 291). Mental content is allowed "to escape into or enter from this ambient space" (p. 291). For example:

- (a) "Interesting ideas just seem to pour out of him."
- (b) "Don't let your feelings flow out so freely."
- (c) "All these thoughts can't gush forth at once." (p. 317)

Consider the linguistic expressions used, for example, when a student "chokes" on a test, an example of "MENTAL DISQUIETUDE IS INHIB-ITED BREATHING." Perhaps she "crammed for the exam." She "stuffed ideas into her head." She "stuffed her head full of ancient philosophy," "soaking up the ideas" (Reddy, 1979, p. 320). Here, ideas have come from an ambient space into her head. But when the professor handed her the exam, "The ideas just wouldn't pour out" (p. 317). "Her thoughts would not flow." Projecting our experience of inhibited air flow onto our experience of inhibited idea flow, we appropriately say: "She choked on the exam." The model of mental functioning operative with this example of the "MENTAL DISQUIETUDE IS INHIBITED BREATHING" metaphor is, then, part of Reddy's minor framework involving the flow of ideas.

In returning to the conceptual metaphor, we see the following ontological correspondence: "THE FLOW OF IDEAS INTO AND OUT OF THE MIND IS THE FLOW OF AIR INTO AND OUT OF THE BODY."

When the body lacks sufficient respiration, it cannot function properly. When the mind lacks conditions that make cognition possible, it cannot function properly. The flow of ideas is the condition that makes cognition possible. Without the flow of ideas, we could not function in the world, have an identity, or attain goals.

The desire to reach goals is very important in this context. Possibilities for action are crucial in understanding constricted breathing metaphors. Is not the uninhibited flow of ideas (proper mental functioning), for the most part, a process of concretely tapping into the possibilities for action? If the flow of ideas is restricted, our horizon of possibilities for action is contracted. If a job or relationship is suffocating, then it is limiting possibilities for action. In *Crime and Punishment*, Raskolnikov is mentally "cramped" and "penned in." His ideas cannot flow. There are no possibilities for consummating meaning in his life. In *The Sickness Unto Death*, Kierkegaard (1849/1980) observed that "possibility is for the self what oxygen is for breathing" (p. 40). "A possibility—then the person in despair breathes again, he revives again, for without possibility a person seems unable to breathe" (p. 39). If our actions are fully determined so that no alternative paths are open, then we cannot breathe, "for it is impossible to breathe necessity exclusively, because that would suffocate [italics added] a person's self" (p. 40). As Levin (1987) said,

"breathing beings will suffocate unless they have *space* to breathe: a space, as it were, of possibility" (p. 132).

We know that as breathing (the flow of air) is inhibited, the body malfunctions and causes distress, possibly resulting in death. Corresponding to this, we know that as cognition (the flow of ideas) is inhibited, the mind malfunctions and causes mental distress, possibly resulting in loss of mental life. This is mental disquietude. The flow of air must be maintained just as the flow of ideas must be maintained. Porfiry's prescription for Raskolnikov, who in Dostoevsky's novel is repeatedly said to be "suffocating" with anxiety, therefore makes perfect sense: "What you need now is fresh air, fresh air, fresh air!" (p. 396; cf. Nietzsche's *Genealogy of Morals*, 1887/1989, pp. 42, 47, 125).

## CONCLUSION

I have argued that our understanding of anxiety is (in part) structured metaphorically by our bodily experience of breathing. I have also shown how features of our experience of inhibited breathing map onto our experience of anxiety. Our emotions, therefore, are not merely matters of subjective feeling, irrelevant to a study of cognition. Emotions have stable conceptual structures that have emerged from our bodily activity through metaphorical projections, structures that are shared in a culture and can be disclosed by empirical inquiry. This suggests that the bodily grounding of metaphor is basic to cognition, strengthening a basic claim of most interpretations of cognitive semantics: Our bodily experience structures our cognitive activity.

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