“Mellow Out,” They Say. If I Only Could

Intensities and Sensitivities of the Young and Bright

Second revised edition

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Personal Energy

High personal energy appears as a surplus of energy that can be physical or mental, like the sustained capacity to concentrate for long hours or to carry on intense organizational work. Heightened excitability of the nerves that control muscles combines with the capacity to sustain the excited state.

As shown in Table 1 (Chapter 3), the heightened energy of a person may find expression in speaking rapidly, outward gestures of excitement, intense athletic activity, physical work, and strong competitiveness. Love of movement for its own sake, rapid speech, pursuit of intense physical activity, drivenness—it all adds up to an enhanced capacity for being active and energetic. For instance, one boy answered the question about his energy buildup as follows:

> When I go into a class with a lot of enthusiasm and energy but the class is slow and boring I come out with two times as much energy ready to explode. Unfortunately I usually let this energy out by talking or goofing off in class resulting in trouble. [M age 13]

Discharging Pent-Up Energy

When not well directed, energy may be discharged through restlessness or impulsive actions. For instance, one bright girl describes how she gets bored in class, often being forced to wait with nothing to do. Not being allowed to go ahead in her studies makes her restless and frustrated. Her reaction is a good example of the peculiar paradox of how school can block positive motivation:

> Sometimes in class (it happens quite often) I get bored because I understand what is being taught, and get a lot of energy. This energy is used to goof off, even though I know I shouldn't. The energy seems to just swell up inside of me, then just flows over. Honestly, some classes are boring and I wish those who understand could go ahead and work. [F age 13]

The first item in the Overexcitability Questionnaire was designed to tap heightened emotion. The question *Do you ever feel high?* was written before "high" acquired the association with drugs. The following response shows how asking about emotion can bring an answer about the rise of physical energy. For this boy, an emotional "high" is actually an experience of the pressure of energy stored in the body, which makes it a psychomotor rather than an emotional response.

> It's hard to describe but it seems like I want to release all the tension stored in me with one big thrust. Explode until all my energy runs out, but when you feel this way you seem to think your energy won't run out. (If I could only do this before a track meet I'd be in good shape.) [M age 15]

The question *What kinds of things get your mind going?* was intended to find out what stimulates the mind, yet the next boy describes a rush of energy reverberating through his body:

> Pretty vague question, sí? things that get <u>me</u> moving include hard driving music and getting behind the wheel of a car. Put them together, dynamite! [M age 17]

The high level of energy of some people has always fascinated me. The source of this energy, and whether there is a way of tapping into it, remains for me an unsolved mystery. At the cellular level, nerve impulses are waves of electric current. The puzzle is how it becomes the mental and emotional energy of the individual.

> Often I get bursts of energy that make me twitch or jump as if suddenly shocked with a high dosage of electricity. [M age 17]

Frequently mentioned ways of discharging surplus energy include moving all the time, enjoying the rush and vroom of a motorcycle, waterskiing, and "hard driving music." If the energy is bottled up, it leaves the person on the verge of exploding or erupting in an uncontrolled outburst. It can bubble over in practical jokes or in vandalism. It can be discharged in the gym, in ball games played hard (all you squash aficionados), in running, or in lifting weights. Any strenuous, tiring, exhausting activity is satisfying, not unlike a battery that has to be run down before it can be recharged again.

Compulsion to Win and Resistance to Compulsion

For some individuals, the compulsion to win comes from operating as if on high octane; for others it is just the opposite: they feel most energized when winning is not important. Thus we have two opposing generators of energy for action, two different sources of motivation: one, a feeling of compulsion, whether it comes from within the self or from outside, the other, a need for freedom from compulsion.

> I enjoy physical activity and playing games, but only when the skill of the performance is not important. If winning becomes important, the joy of the thing leaves. I enjoy playing baseball, basketball, football, and almost any other sport as long as no one cares who will win. Once someone cares, I lose interest. [M age 18]

The desire to be free of compulsion—the will of another being imposed on one—leads to a kind of resistance. *Resistance to compulsion* is perhaps the most overlooked motivating agent in procrastination, learning difficulties, refusal to work, and so on. These free spirits—children and adults—very much prefer unstructured time, freedom from deadlines and specific directions. They like to accomplish things according to their own schedule. They are usually filled with creative, imaginative ideas. They like to discover things on their own and to create things through their own projects:

> I have the most energy when I'm doing something I'm interested in, particularly when I don't have to do something else and I don't have any deadlines to meet. [F age 16]
>
> I am filled with energy just before I am going to do something I am interested in. This is, of course, the adrenalin effect. Anyway, I get filled with energy when I need that energy. And, of course, I release it by doing that thing which got me excited in the first place. [M age 18]

Stephanie Tolan remarked that when some highly gifted adolescents become deeply involved in a project *of their own devising*, they can go without sleep for extended periods of time. These projects demand an intellectual and creative concentration. When they are done, the youngsters tend to "crash."[1] Resistance to compulsion is at the root of being independent and unconventional, a characteristic of creative people.[2]

Children and students show resistance to compulsion on many occasions. Being treated unfairly, without respect, or with disregard for their intelligence often provokes resistance and refusal to cooperate. Students of a minority or of different race often resist learning because they feel it is prejudiced and not relevant to them. It is their way of taking a stance against unfair treatment by the dominant culture.[3]

Resistance to compulsion goes by other names, such as academic resistance or Bartleby syndrome, after a character in a Herman Melville story who politely refuses to work by saying, "I prefer not to."[4]

Ways of Commanding Energy

Inactivity, be it sleep or boredom, quickly recharges the energetic individual. Some, however, enjoy a steady level of high energy always available to them—for instance, "I never really get an overflow of energy. I'm energetic most of the time." Some have it ready on command: "I get filled with energy when I need that energy," or "[I have it] after I talked myself into it."

These two expressions point to the role of *will* in these young people. It is enough for them to decide to do something, and the energy and the motivation to do it is there; they don't have to kick themselves into action. Similarly, those who find a second wind when fatigue is about to overtake them, or those who hate to stop once the momentum carries their work along, have energy available at the command of their will.

Here are responses to the question *When do you feel filled with the most energy?*

> Dance, most definitely—also pantomime and creative movement—all three are very related to one another. As far as sports are concerned: tennis, because it's very demanding (in that aspect it's like dancing). I really don't strive for performing in dance, just an outlet of energy and expression—I find it very satisfying but also private. If it's exhausting, I usually find it satisfying. [M age 17]

> Probably when I sit around too much. If I sit around for more than a day I'll usually feel filled with a lot of energy. To discharge it I'll either run or ride my bicycle. Also, sometimes I unconsciously discharge my energy on my little brother in the form of fighting. [M age 15]

> Any type of physical activity that leaves me exhausted makes me feel great, it makes me get a feeling of well being. Things like gymnastics, biking, running or jogging—or really anything that's strenuous is fun to me. [F age 17]

But one boy shot this reply, no doubt speaking for others like himself:

> It would be easier to tell you when I don't feel the most energy. [M age 17]

In replies to the question *What kind of play, games, or practical jokes do you engage in?* we find humor, intellectual stimulation (games of chance), and imagination (extravagant ideas for practical jokes): "Mild vandalism, and games of chance" [M age 17]; "All sports, practical jokes—extravagant thought

out ones" [M age 14]. (Could this foreshadow something? Abraham Lincoln as a young man was a dedicated prankster.) Other replies mention playing "games like volleyball, soccer, basketball, badminton, tag, and softball, really active, tiring games" as venues for release of energy.

Here is an analysis of excitement offered by a 17-year-old who tends toward the extreme in physical expression:

> When I get excited because I am scared, I start getting physical and making jokes. If anyone scares me just for a second, I would probably pick them up and spin them around 'till they get dizzy. If I am excited from a long-term scaredness, I will start making jokes, which my companions get tired of, and I impersonate comedians.
>
> When I get excited because I am happy, I get all hot and spastic. I flutter all over the place and don't get anything done. In extremely excited states, I will start shaking and tapping my fingers and toes and I can't hold my legs still. [M age 17]

Making jokes out of nervousness is typical of students who take on the role of a class clown. Leslie Jacoby made a study of humorous sixth graders. They were very bright and tended to come from families with internal strife. Their intelligence enabled them to use humor as a defensive strategy.[5]

The question *What kind of physical activity (or inactivity) gives you the most satisfaction?* evoked a number of different responses. For example:

> Either sexual intercourse or playing music. I'd be hard put to choose between the two. Or perhaps, the time spent with my girlfriend after sexual intercourse—the warm, soft moments spent just holding and cuddling. [M age 15]
>
> If I said sex would you die laughing or just be shocked? [F age 16]

Coping with Stress and Emotional Tension

Children and adolescents are subject to stress no less than adults. To discharge the tension, they develop nervous habits. Emotional tension may be funneled into the physical channel—the muscles—through psychomotor forms of expression, such as compulsive talking or chattering, acting on impulse, nervous habits, working compulsively, or acting out destructively. Two questions brought many responses of this kind: *On what occasions do you find yourself chattering or talking incessantly*? and *Do you have any nervous habits?* Out of 31 teens, only one answered "no" to the question about nervous habits.

> I bite my nails. I get nervous stomach aches. My knees shake. I pull on my fingers. Tap my feet. [F age 17]

1. I pace when waiting for the bus in the morning.
2. I rattle my fingers on desks.
3. When standing in front of a crowd I [w]rest my hands together.
4. I twiddle my thumbs. [M age 16]

Rattled nerves launch pencils and rap dental rhythms:

> I can't think of any nervous habits except one. I have a habit of clicking my retainer for my teeth on and off my teeth. [M age 15]

> Playing with my pencil. I don't know how many times it's flown across a room during class. Biting my lips. Fiddling with my hair. Eating. [F age 18]

> I bite my pencils and pens—especially during school—I also tend to tear up things like paper napkins at the dinner table—if you call that a nervous habit—I don't know! Question: Did I pass? I know I'm strange! [F age 17]

Much of the stress comes from the pressure of competition and the effort to stay at the top:

> Yes—I'm a nail-biter and after my nails are chewed to a pulp, I start in on my split ends (I break'em off). Lately—when

> I'm extremely nervous and I must speak (forensics) or play flute, my mouth dries up and it's like I have cotton balls in it. (Quite horrible!) I think I've lost a lot of confidence and am more insecure when it comes to speaking. It might be 'cuz my best friend and I, who are competing against each other a lot, sort of "out shines" me and where once I was in the "front seat," now it's like I'm in the trunk! She does everything so damn good! [F age 17]

The following response from an older student shows an unusual level of self-awareness. He inhibits all nervous expression to spare himself possible embarrassment:

> My biggest nervous habit is an internal one. I become acutely aware of everything I am saying and doing, and try to avoid doing anything embarrassing almost to the point of absurdity. I stop talking, stop acting, and try to sometimes stop moving to avoid attracting unfavorable attention to myself. This nervous habit probably keeps me from developing any nervous mannerisms, such as drumming my fingers, straightening my tie, or developing a nervous twitch. [M age 18]

Summing Up

Giftedness is synonymous with high energy levels. The energy can take many forms, from physical to intellectual and emotional. Some youngsters' energy is consistently high; they just don't seem to run out of it. Others related daily cycles of energy rising in the morning, sustained through the day, and abating at night. Still others can command their energy at will whenever they need it. Will enters the picture also in the phenomenon of resistance to compulsion—resisting what one is forced to do without consent. This phenomenon is a much-overlooked motivator when procrastination and learning difficulties are confronted.

Heightened psychomotor excitability also serves as a channel for siphoning off emotional tension and nervousness. Some youngsters said that strenuous physical activity to the

point of exhaustion is a thoroughly satisfying release of excess energy. It can also be a means of reducing emotional tension.

The big question is how the electric current in the brain cells becomes will and determination and how to account for the enormous differences in the level of energy between individuals. The closer we look, the more complex the overall picture becomes.

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Imaginary and Imaginal: The Universe of Unlimited Possibilities

One of the most powerful entities on earth: a young imagination.
—Charlotte Reznick

Our mental development begins in imagination. In her book on what children's minds tell us about truth, love, and the meaning of life, Alison Gopnik explains that babies have brains "that make them especially well suited for imagination and learning. Babies' brains are actually more highly connected than adult brains; more neural pathways are available to babies than adults."[2] Experiencing countless situations of what makes things happen leads to developing a sense of cause and effect. Although the process is not conscious, children develop causal maps of how the world works. As they gain experience, these maps undergo revisions to reflect new knowledge. The maps also serve to imagine what is possible. "It's because we know something about how events are connected that we can imagine altering those connections and creating new ones. It's because we know about this world that we can create possible worlds."[3] Knowledge and imagination work together.

An excitable imagination annoys more down-to-earth people as exaggeration or as an ominous departure from reality. Imaginative children are often not believed, even called liars—the bad luck of being born into task-oriented, reality-bound families. Rather than appreciating each other, the parties are in conflict over their opposing perceptions of the world. Anne

and her aunt in L. M. Montgomery's *Anne of Green Gables* are a classic example of such a conflict.

The Reality of Things Experienced in Imagination

Children tell fantastic stories, talk and play with imaginary companions, and say that they see fairies or angels. Is it all "imaginary" and therefore "unreal"? Children tell us about their experience in their inner world. When we read a novel, we feel in touch with the characters, and we retain the memory of the experience. Although it takes place in the theater of our mind, the experience can feel perfectly real, as in this example of imagining:

> Riding a strong, huge, white horse on a beach cantering full speed, riding so close to the ocean the water splashes my face as the horse runs. [F age 13]

Children know well the difference between what is in their imagination and what belongs to outside reality, as Jerome Singer has discovered.[4] Playing games of pretending, they know full well it's a fantasy. We use the term *imaginary* in the concepts of imaginary friends and imaginary worlds. We just need to free it from association with something that has no existence because what is imagined does exist in the inner world of a person. The term *imaginal* becomes helpful in this respect.

One child announced: "Here are the chests where I have laid dying sunsets to rest." Who can resist being captivated by the idea of sunlight as a living being, dying at the end of the day and in need of rest in a quiet place? Sunsets drew empathy from the boy, moving him to create a small drama in which he was the sunsets' caretaker. (This boy grew up to be the writer Antoine de Saint-Exupéry.[5]) The image communicates the experience so that someone else may know what it feels like. Therefore, it is not something unreal, something without existence, which is the usual sense of "imaginary." For this reason, experiences

that occur in the mental universe of imagination are called *imaginal*.[6] And they can feel completely real.

People who sprinkle their speech with images, similes, and metaphors are strongly suspect of having a highly active imagination. One teenager described feeling happy: "It's like a warm wind blowing within, an internal sun and fields and fields of daisies." Feeling unhappy: "it's like I'm sinking into an endless hole—it seems life almost ceases. I guess you could call it suspended animation. Things go on in a routine way like normal, but without spirit and enthusiasm." Through these scenes, this girl conveys the feeling involved.

How does this work? The picture strikes a chord in the storehouse of our experience. We know how it feels to be warm inside, how the warmth of the sun feels on a pleasant day, and how the sight of daisies makes us smile. We also know depression's downward pull, the loss of feeling and will, that if we are still functioning, we are no more than automatons.

But an image is powerful in still another way. Even if we have never been ecstatically happy or depressed, the imagery, through connection with sensory experience, gives us an idea of what it might feel like. This, of course, is the way of literature and poetry.[7]

When excited, imagination sparkles with rich associations and novel analogies. When Benjamin Franklin was trying to grasp the nature of electricity, he thought of it as a subtle fluid. Taking fluid as a model for electricity made it easier to explore its properties until further discoveries showed the model's limitations.[8]

To be able to perceive one elusive thing in something else that is more concrete is the essence of thinking in analogies. For instance, sound is nothing more than vibrations of matter. Yet we can describe one voice as mellifluous—that is, like liquid honey—and another as smoky or raspy, conjuring up the image of a blues singer. We can feel in music joy or sadness,

agitation or tranquility. But music is only lots of sounds in motion. How then do we arrive at perceiving emotion in music? What we perceive is a similarity—in fact, an analogy—between emotions and the way the sounds are shaped. Our minds recognize in music the likeness of our emotions.[9]

Inexhaustible possibilities lie in the power of imagination. Tigers may have no imagination, but imaginary tigers can be made of flames. Imagination allows one to conjure up scenes and events, be part of them, or transport oneself to places that can only be conceived in some other reality.

Imagination may be purposeful or free-wheeling. Free play of imagination helps to escape dull routine by making things more colorful and dramatic. We encounter the same freedom in the world of fantasy and magic tales. In tedious meetings you can watch cartoons in the theater of your mind (at the risk of an involuntary chuckle).

Purposeful imagination is directed toward finding solutions to problems by sweeps of imagination called divergent thinking, or thinking outside the box.[10] What looks from the outside as distraction, wandering attention, and unproductive daydreaming—a "deviance" not tolerated well in a task-bound, clock-driven world—is actually a mind working things out in the inner universe of the imagination (see Chapter 8). Had we no imagination, how could we ever invent anything?

For imaginative, creative people, the contrast between the limitless possibilities of imagination and plain, everyday existence is extreme. Their need for novelty springs from a low tolerance for boredom.

We now turn to expressions of excitable imagination. The responses often included a mix of emotional, sensuous, and kinesthetic elements.

Images as a Means of Conveying Feeling

Let's start with images used to express feelings. In the first example, the child is so absorbed in the music that she becomes part of it. Her concentration blocks out external sounds. She is in the "zone" or "flow." In trying to communicate the experience, she resorts to two extreme comparisons:

> [My most intense pleasure is] being involved in music. Touching the keyboard of a piano and challenging myself to make the sounds come out absolutely perfect. When it does come out perfect I feel so neat. I don't know how to describe it with words. I suppose it would be something like your first kiss or if you hadn't taken a bath in 10 years and you got to take one. These are weird similarities but the sensations are somewhat the same. In those situations at the piano my body just seethes with music and sometimes I can get so lost in it I don't hear any other sounds and if I have it memorized I can close my eyes and become part of it. To someone who isn't into music this might sound a bit absurd but you asked for it and you got it. [F age 12]

The second example is an attempt to convey the experience of depression:

> [Feeling low or depressed] I would say deep purple would fit the mood, and the frustration a bird would feel flying against a 60 m.p.h. gale would describe it. It's a state of trying the hardest but getting nowhere, finally surrendering to the elements. [F age 15]

Feelings take place within a person. They cannot be transferred to communicate the experience. Nor can one make a copy of the feelings and hand it over. But an image is an approximate (analogous) likeness that another person can receive. The senses give us a common basis for communication via an image. In the two previous examples, the girls relied on sensory experience to express extreme feelings: blissful joy as the first kiss or a bath to wash off years of dirt, loss of vitality as a somber color and pushing against an overwhelming force.

The emotional appeal of art comes about in a similar manner. *Aesthetic* means "perceptible by the senses." To create metaphors we rely on sense perceptions—a piece of rock may feel rough or smooth, as current in a stream may be rough or smooth, though we have not touched it. A day in a person's life may be rough or smooth, although nothing was touched. Artists tend to be particularly aware of sensory qualities and their aesthetic possibilities—how to use sensory qualities to express felt experience.[11] In the *Pastoral Symphony*, Beethoven depicted a storm. First, restless tremolos in the basses create a feeling of anticipation, to which the violins make an anxious response; then comes the first thunder. Soon rapidly descending violin tremolos make us hear and see the rain being slashed by the wind while the drum roll and double basses make thunder. Later a quieter drum roll tells us the thunder is farther away; the storm is passing. Then limpid sounds conjure up a rainbow in the sky. Using only the sounds of a few instruments, Beethoven created the quality of an experience familiar to us from having been in a storm.

The Powers of Visualization

Let us now look at responses to questions designed to elicit expressions indicative of vivid imagination. The first question was *How precisely can you visualize events, real or imaginary?* Most children have good imagination. The very bright ones tend to see things in great detail.

> I can visualize almost everything as clear as if I were seeing it. When I read a book if I can't "see" what I'm reading I stop reading for a moment until I can "see." If I'm reading, and the book describes something like a house or a way something looks I visualize it, not always the way it says in the story but sometimes my own way. [F age 12]

> Very precisely. I do visualize it, too, with a sort of narrative along with the visuals. Real events are like a photograph, I can dissect and examine at length what happened in seconds.

> I enjoy visualizing imaginary events because I have control over the small details. If I imagine a person, for instance—I can see the eyes, their color, size, etc., everything—…. [M age 17]

> Pretty well, sometimes it seems like I can touch what I'm thinking about. [F age 13]

For a writer, it is essential to be able to see things from the reader's point of view. The writer has to evoke the scene in the reader's mind.

> I have a vivid imagination so I can usually picture anything that is described to me. Of course many times my imagination exceeds reality, so my visualizations aren't very precise. I love to read, and one of the biggest parts of reading a book…is visualizing the settings. As an author I find that to be one of the hardest parts of writing—describing a scene, that you have a vivid picture of, to a reader who may be visualizing a totally different scene. [M age 16]

With open eyes we see only what is before us. In visualizing, it may be possible to see in every direction at once. One girl thus described her ability to visualize things:

> Past events, [and those] that are going to be, both come in clearly with detail. But they are imaginary because it appears as being both as if I was seeing it from my eyes, and as if I am seeing the whole picture with me in it. [F age 13]

Mind Games

The following is an example of carrying out a whole athletic game in one's mind:

> There are a couple [of things I can visualize well]. One of them is playing basketball for a major college. I imagine what I would do in certain situations playing against some of the best players in the country. I can see everything very clearly, and I do some moves that I know I could do if I were a little taller. Most of my moves end up in slam dunks, which are very easy to do in my daydreams. I can think through almost

> a full game. If I really concentrate and get into it, I can even picture the crowd. [M age 16]

The research psychologist Jerome Singer studied the inner world of daydreaming.[12] His own daydreams were very much like those cited here. The elaborate fantasies of his youth involved heroic figures and a whole baseball team whose imagined games he followed for many years. The team's home-run star was also an accomplished operatic baritone.

Trance-Like Absorption

Imaginal experience can be so vivid that it has all the trappings of reality. In the next example, the boy appears to slip into a trance. When such a state is interrupted, it delivers a jolt to the body and the psyche. Suddenly forced to return to consciousness of his surroundings, his shudder looks like a seizure. He is responding to the question *Do you catch yourself seeing or imagining things?*

> Yes. I hope I'll outgrow it because it can be really bothersome. When I do, I become (and stay that way for a while) very spacey and absentminded.
>
> I often hear music and become totally absorbed in listening— this happens in school often and thus has caused me considerable trouble: the same happens seeing and imagining things; one teacher thought I was epileptic.
>
> Lots of times I see a sort of place where children live and play and dance and I watch them and it's so <u>real</u>—whenever someone somehow breaks into my imaginings and "wakes me up" I get hostile and angry with them.
>
> I don't have it as much as I used to and it's becoming easier to be drawn out of it. [M age 17]

A girl found herself similarly physically startled when she became deeply absorbed in her inner pictures:

> Every now and then I'll unintentionally jump in my seat during some boring class I thought I had been paying attention to, after suddenly imagining some sort of physical activity. I'll

> see the people I want to see in the wrong people's faces. And when I go out on long walks to relax myself I sometimes have to shake my head three times to see if something is or isn't there. [F age 16]

The boy in the next example is expressing a realistic concern about a condition that plagues people whose imagination is "as real as real" (see Chapter 10). It acts instantly. For such people, when they are driving, it is enough to think of a dog or child crossing the street in front of the car that they slam on the brakes.

> Yes, often my imagination takes over and I absolutely hear a voice or see someone running. I fear I'm going to be a menace on the roads when I get my license because of this tendency. [M age 15]

What is your special kind of daydreams and fantasies? brought several kinds of answers: dreams of achievement, dreams of a better world, free flight of the imagination, ideas for a way out of trouble, and an outlet for frustration and aggressive feelings. Dreams of a better world express the desire to be active in building such a world.

Dreams of Rebellion, Escape, and Adventure

Rebellious thoughts against adult power don't wait for adolescence. "Can there be anything as sweet as victory over authority?"[13] As adults we give children too little attention; we do not try to understand them; we give little weight to their experience. Annemarie Roeper often said that children study us, examine us, and often test us to see if we respect them. They tend to keep their findings to themselves.[14] One 9-year-old boy, certainly not an exception, found an outlet for his frustration by dreaming of "taking over the school." An irrepressible teenager said:

> Last summer when I went to drama camp. The adults couldn't control us kids and this girl and I led an army of renegade kids and she and I were voted Mr. and Mrs. Mischief. The

> best part was proving that kids can do whatever they put their minds to and that adults aren't always as "in control" as they like to believe. I've always been an avid supporter of kids' rights. [M age 15]

A child may wish for an easy way out of trouble or to be free of stress:

> My special fantasy is to find a lamp on the street, open it up and find a Jeenie [genie] who would give me all the wishes I ever wanted so whenever I would be in trouble I could wish my way out of it. [M age 11]

> Yes, I imagine a life where there aren't any problems or troubles. I think about living out in the wilds with the animals. [M age 15]

Children and adolescents may dream of adventure: being the best spy in the world, traveling in time machines, or "Meeting someone important. Preferably Marcel Marceau [a famous mime]. Doing something in acting" [F age 12]. Or they may dream up inventions—for instance, "To achieve flight without the aid of wings, planes, propellers, etc." [M age 14].

Dreams of Achievement

A girl dreams of inspiring others with her music; another wants to fulfill the call of her multiple talents. In the early teens, multiple talents are pursued with passion.

> When I take time to daydream it's usually not just an illusion but a goal. I dream about being on stage as a concert pianist. Not famous, but just enjoying the glare of the lights and the power of the keyboard. Sometimes I think about the applause but then I feel sort of guilty because that's not the real reason that I want to be there. I want to be there to make others happy and to give myself a feeling of accomplishment and content. [F age 12]

Many youngsters are keenly aware that pursuing what one loves does not always guarantee making a living at it. Art, music, and theater satisfy the soul but often fail to put bread

on the table, while accounting, business, and engineering feed the body but may leave the soul hungry.[15]

> My two daydreams/fantasies are to either be a wonderful, famous or not, it does not matter, lawyer, or to dance on Broadway in a production. My ultimate dream and this really is a dream, [is] to be both, a lawyer of the utmost esteem and a dancer of the utmost esteem. Don't ask me how it's possible, I don't know, yet. [F age 13]

Some daydreamers go to extremes:

> I daydream (at school) that I take Chemistry, Analysis, Physics, Geometry, Trig., and British Lit. all the same year, but instead of going to college I end up going to a mental institution. I can see the white jacket and everything. [F age 15]

Some dream of doing something spectacular to win recognition:

> I always dream of doing something great. One of the daydreams I have a lot is about getting paralyzed and then coming back and doing some great thing like dragging my body across the United States (well…). Anyway, I like to think of everyone trying to feel sorry for me, but coming back and showing them that no matter what, I can overcome a difficult problem. [F age 16]

Dreams of a Better World

Dreams of a better world are typical of youth sensitive to the precarious condition of the world. Keenly aware of the problems plaguing our society, young people feel that if things were in their hands, the problems would be solved.

> I dream of the future. A future where peace is the law and militaries help and rescue people. The worldwide government would consist of thousands of representatives from different places around the world. Each representative would not be elected from area of land, but by equal amount of voters. I also dream of flying different kinds of aircraft and also going on interstellar voyages. [M age 13]

> [I dream] that society becomes one where people are judged by their abilities and accomplishments—not sex, race, religion and beliefs, OR AGE. Another is being able to raise a child free from the contaminations produced by modern-day society.
>
> Another is banishing our sexist ideas on relationships between 2 people. Two of my 4 best friends are girls, and people just can't understand how a boy and a girl can be friends without romance. It drives me crazy. [M age 15]

Fantasy

Being bored in school stimulates creative fantasizing:

> I like to think about things not many other people do. Like what will fire hydrants look like in the future. [F age 13]
>
> I also have one in which I can get inside people's heads to see what "makes them go" or can have everything and everyone stop and freeze in their tracks (everyone except me) so I can go around and see what they're doing. [M age 15]
>
> Talking to little people who live in mouse holes. Or riding Silver (used to be) my second grade "instant horse." [F age 13]

Here is an example of whimsical interaction with plants and inanimate objects:

> Once in a while I try to hypnotize my plants. And I even tried to put a rock in a trance, but I think that day I was desperate for something to do. When I was in 5th grade I went through a phase where I was even paranoid about ripping pages out of my notebook for fear I might hurt it. Really dumb, huh? [F age 15]

Fantasy worlds tempt with their freedom and fulfillment of any desires. They are also an essential safety valve against tensions and pressures, "a way to get away from it all":

> A fantasy I have would be like (this is gonna sound slightly stupid) becoming a princess in a fantasyland and riding off on a unicorn with some gorgeous hunk! I like unicorns and I

> dream about having one. A place with castles and dragons and things like that. [F age 16]

> In my daydreams I might save a village or rescue a maiden.… I enjoy daydreaming and hope I never stop, for it is a way to get away from it all. [M age 17]

Daydreaming, or fantasizing, is very private. Experience shows that it is prudent to refrain from sharing it with others unless they too are good fantasizers, but how is one to know?

Dreams

Like daydreams, dreams can be self-designed: "I often daydream before I fall to sleep at night—usually even plan what I'm going to daydream about" [M age 17]. The question *What kind of dreams do you have and how often?* yielded reports of dreams with content that was disturbing, enjoyable, or even precognitive.

> [I dream] Twice a week, usually they are wild impossible things, happening in places like—the public library, the hospital, school. Very seldom violent although often terrifying—Poe-like in content. I sometimes dream about people I love getting killed, my lovers killed in a war, a car accident, a heart attack. Sometimes I'll dream I'm dancing, endlessly dancing. [F age 16]

Dreams can serve as a means of working out the tensions of the day. Being aware of the dream may come close to what is called lucid dreaming. In the following example, the girl tells herself that her bad dream is only a dream while she is dreaming it.

> If something is bothering me I'll often have dreams which I can relate to what's going on inside me.… Sometimes in bad dreams I can remember telling myself not to worry because it's only a dream. I've dreamt about dying but never actually [of] being dead. I can remember the fear from those dreams. I remember my dreams quite often. Many times things will happen the next day which causes me to remember a dream. [F age 17]

Here are two examples of precognitive dreams:

> While I was sleeping, I saw a car smashed on the driver's side and turned upside down against a tree. The next day at school everyone was talking about it. One of the senior boys had an accident. The senior boy...helped me with my science project three weeks earlier. He was injured seriously but is alright now. [F age 16]

> Extremely clear. When I have dreams at night, they go into great detail. Like, the separate articles scattered through a room or faces in a crowd. Sometimes it's scary because the same situations or parts of my dreams will be presented to me a few days down the road sometimes. [M age 18]

Phantasms

Another question to probe imagination is *Do you ever catch yourself seeing, hearing, or imagining things that aren't really there?* Here are some examples of imaginings: objects talking, strange people present in the bedroom, and, of course, Martians.

> Sometimes when I leave the house I get the suspicion that everything in the house starts talking. [M age 11]

> When I come home from a dance, and I go to sleep, I often wake up later and see all the people that I would see at the dance. And I can hear the band playing so loud. You can't really say that I'm dreaming 'cause I'm awake. I just imagine that everyone is in my room. They come and talk to me, and it doesn't seem strange at all that I am in bed. I just lay there trying to go to sleep, and I wish they would leave me alone. [F age 15]

> Yes. Lots of times I'll know without people telling me and it gets confusing. I can't explain it, really. I also have a vivid imagination. (It was certainly bad when I was little.) Once, when I was about 5, I thought Martians lived in this one deserted house. I really believed it. I still get touchy when someone brings it up. [M age 15]

Animism

An interesting feature of children's minds is animistic thinking—endowing inanimate objects with personality and intention, as in Saint-Exupéry's dying sunsets or in the following examples from gifted students:

> I can remember even when I was only 5 or 6 that I thought of my crib as alive. I thought of all the children that had slept in it, and I thought that it actually was worried about me when I was sick or I couldn't go to sleep. Weird!! [F age 15]

> I like to put my spirit into inanimate objects to think about how they would feel. For example, I think of a chair and wonder how it feels. People sit on it and use it all the time. Then I think, That's what it was made for, and is best at, so a chair might be happy. [M age 17]

Another interesting feature is magical thinking—attempting to make things happen by thinking and wishing them to happen. There are adults who have retained this childlike quality often associated with creativity.

Empathy with the Natural World

The question *Does it ever appear to you that the things around you may have a life of their own and that plants, animals, and all things in nature have their own feelings?* often drew responses based on the common belief that animals have feelings but plants do not. This question produced strong emotional responses. But it takes imagination to endow plants, rocks, or other inanimate entities with life.

Examples of sensitivity to nature tend to be more common in younger kids. Children live in the present, in the immediate realm of sensations and feelings, in touch with the world around them. And the world of nature does not order them around! Only later, in response to social pressure and schooling, thinking about past and future displaces the immediate present.

> Sometimes I feel everything around me is alive. [M age 9]

> Yes, like everything wants to play and have fun. [M age 13]
>
> Yes, that when I kill an ant it is screaming out in pain. [M age 14]
>
> Plants kind of droop when they're not being loved. [M age 9]
>
> Whenever someone prunes a tree I feel like they're cutting off its arms. [F age 9]
>
> YES! I'm always thinking when I step on a plant I think I am sorry because it must not feel too good. Or my stuffed animals, how they feel. I think everything has feelings. [F age 11]

These expressions of empathy with nature remind us how important the bond with nature is for children's (and adults') well-being. Until recently, this essential aspect of human experience and mental health has been overlooked.[16]

The next two examples are instances of moral imagination aroused by empathy with animals and plants. In the third, the child is moved to anger at the injustice of hurting a living being.

> Yes. I think that an injured animal feels pain and I feel pain because it does. [F age 9]
>
> Yes, because if you break off a tree branch the part that you broke off will die. Like [if] you lose a limb that part of you will die. [M age 9]
>
> When I see someone abusing a plant or an animal, I want to kill them. [M age 11]

The next two examples present musings on the hierarchy of the natural world:

> I often speculate on how a plant feels, what it experiences. Humans abuse plants so, and they are so dependent on them. I would love to have scientists discover that cancer or some other feared disease was transmitted from plants to people who malign them. Highly improbable, but equally just. If I was a plant, I think I would know certain secrets that all plants know

> that would make me grow and make me content to just sit in the dirt. I feel the same about animals. Animals are abused by us, etc. But I do not want to be any animal except a human being. Life is so cruel and harsh for ordinary animals and they can't do much about that. I sometimes consider plants to be above animals in the way that some people consider cats to be superior to dogs. [M age 17]

> I'm totally convinced dogs are of higher intelligence than we give them credit for. And sometimes I wonder if they aren't of an even higher intelligence, and they're just faking it (being dumb). I feel that even the smallest (amoeba) had its own moral standard. Whatever that may be. [F age 15]

Children sometimes try to imagine how plants communicate, or they wish they could communicate with them; they form their own theories about it:

> Sometimes I wonder how plants talk. [M age 9]

> I like think when I lean against a tree. Does this hurt him or what and wish it could like tell me if anything's wrong. [M age 11]

The next set of examples illustrates relating in a personal, feelingful way to nature. The blending of imagination and emotional excitability is very evident.

> It often appears to me that things around me have a life of their own. When the wind blows it seems as if the trees are complaining at their mistreatment. When it rains it seems as if the plants look up and say thank you. When I see spiders it seems to me as if they are pleading with you not to kill them, as if life means as much to them as it does to us. [M age 13]

> Sometimes animals look to you as though they are your human friend, and sometimes trees and clouds have shapes that give themselves a personality. [F age 13]

The following examples show identification with the natural world as a prime example of empathy. In the first, things are viewed from an insect's perspective:

> This is really sort of a silly example but I sometimes think if I squish a bug what if that little bug had a family and children and a wife then I start to feel really bad and I start to think that if I just got squished by some uncaring person how it would feel to my family and friends. And then I start to feel real guilty and want to bring the little guy/gal back. [F age 13]

> I can tell that animals are so much like us in being creatures of this world, having all that we have, being equal. I could almost detect a little sense of understanding while I sat near a muskrat, and watched [it] pluck the grasses. I could relate to this need to build and to play easily. [F age 13]

To the Tibetans, the two worst deeds one can commit are hurting a child and picking a wildflower. This girl feels the same way:

> Yes. I first noticed this a long time ago when I thought that stepping on grass was cruel. Later I decided that it wouldn't be so short if it weren't to be stepped on. Picking flowers is mean. I just try to respect everything as having a life of its own. [F age 13]

The following responses are examples of taking movement as a sign that something is alive. We have a deeply encoded association between movement and life. Dead things don't move. When motion ceases, it is death. In art the suggestion of movement makes us perceive a painting or sculpture as imbued with life. Because we feel, we know we are alive. Works of art appeal to us when they resonate with our feeling; they impress us with their inner pulse. This q*uality of livingness* suggested to the philosopher Susanne Langer that we respond to art to the degree that it has the appearance of a living form.[17]

> I do think that all things have their own life and mysterious ways of communicating with each other; and possibly each has its own soul. I don't have any grounds for stating these things, but it appears to me that all is living just by observing things like water gurgling in a brook, or dry leaves rustling,

> or whistling winds—Like they're commenting on the day's happenings. [F age 15]

The following example suggests imagination, empathy, and intellectual excitability working together:

> Yes. Sometimes I'll watch my dog and try to figure out what she's thinking. Is she bored? Is she happy? Does she want to communicate with me? Sometimes I think about little bugs getting stepped on. I wonder if they really hurt bad or if they are scared. I wonder if they can talk to each other. Sometimes I even wonder if grass, and other plants, can feel it when they get stepped on. I wonder if they can actually think. Maybe their cells can do a kind of thought process that we haven't discovered or just can't understand. I wonder if they have emotions. Do they have good days and bad days? Can plants communicate? [M age 16]

Eugene Linden described how animals observe humans, especially in captivity in zoos, and are capable of using what they figure about people.[18] In the next example, the boy takes the perspective of the animal:

> I know most animals, or at least most mammals, have their own thoughts. Animals like dogs and monkeys, the more intelligent creatures, come across to me as having what we would call human emotions and personalities. I often get the feeling that they are appraising me as I do them. [M age 17]

Imagination and Creative Expression

The question *Are you poetically inclined?* was intended to tap poetic expression as the domain of imagination and emotions. Young people write poetry, but few poems were shared, none of eminent quality. Writing talent takes years to develop, and although writing prodigies exist, they are fairly rare.[19] The first example is a response from a young man who takes his writing seriously:

> When I write a poem, more so than other things, I try to word everything perfectly. I search my sources thoroughly until I

> find that perfect word. I usually am writing the poem for a friend on their birthday, to tell them thank you, or to tell them I am sorry. For this reason my poems are a part of me and therefore are written with real meaning and are written delicately. I think my poems through very well. [M age 17]
>
> Usually my poems are short, humorous ditties that aren't very good, but fun to think up. I also like to rewrite the words to popular songs. [M age 16]
>
> When in a romantic mood: beautiful sunsets; dawning of a new day; running hand-in-hand thru a meadow; being alone; going away forever from a person I love; birds; special events in my life; deepest, deepest desires of my life—All the beautiful things in the world—
>
> When in a morbid mood: death; unknown; questioning life; questioning God; struggles between Satan and God; fore-knowledge of spiritual presences; and any strange bizarre thoughts my mind can conjure up—. [F age 15]

Summing Up

Imagination is a vast subject. Because the common meaning of *imaginary* is of something that does not exist, the term *imaginal* addresses the reality of such experiences as lived experiences. To what kind of reality or dimension do these experiences belong? What makes them possible? Those who visualize well, to whom the imagined experiences are vivid, describe them in tangible terms.

People with vivid imaginations have a low tolerance for boredom and need time for daydreaming, fantasy, or games (tennis, basketball, chess) played completely in their mind's eye.

Children feel that everything around them is alive. They show empathy toward plants and animals. The natural world offers them freedom from being told to eat what they don't like and to go to bed on time.

Imagination is indispensable to cognition. Without imagination, analogy and metaphor would not be possible. In turn, invention and communication of ideas, and communication of feelings and emotions, would not be possible without imaginative analogies and metaphors. Metaphors rely on the storehouse of our experience to convey feelingful states.

This chapter has just begun to explore the varieties of active imagination. The examples illustrate typical provinces of imagination—daydreams, elaborate fantasies, dreams of adventure and spectacular achievement—but also something more: precognitive dreams.