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**Descriptive Experience Sampling**

**Russell T. Hurlburt**

**Abstract**

Descriptive Experience Sampling (DES) is an approach to apprehending and describing pristine inner experience in high fidelity. The DES participant wears a random beeper in her natural environments. The beep cues the participant to jot down notes about her inner experience that was ongoing at the moment of the beep. A subsequent expositional interview produces a description of the beeped experience. It is likely that the fidelity of those descriptions iteratively increases across sampling days as participant and investigator acquire skill a bracketing presuppositions about the nature of the participant's experience.

**Keywords**

Pristine inner experience; bracketing presuppositions; random sampling; beeper; phenomenological fidelity

Descriptive Experience Sampling (DES) is an approach to apprehending and describing pristine inner experience, an approach that submits to the constraints that such exploration imposes.

### **Pristine Inner Experience**

Pristine inner experiences (Hurlburt, 2011; Hurlburt & Akhter, 2006) are the salient phenomena (including seeings, hearings, inner speakings, thoughts, tickles, sensations, feelings, etc.) that naturally occur and are directly apprehended by people in their everyday environments. Pristine experiences are unscripted, unedited, naturally occurring phenomena. At any moment there is a welter of ongoing stimuli (inner and outer, visual, auditory, kinesthetic, imaginary, etc.); out of that welter emerge one or a few directly apprehended experiences; those are the pristine experiences. People are responsive to some of the remaining stimuli in the welter, but that responsiveness is not thematically apprehended, not explicitly before the footlights of consciousness, and therefore not pristine experience.

Pristine experiences are phenomena as they naturally occur, undisturbed by the act of observation. Pristine experiences are intimately personal, tailored by the individual to precisely their own interests and needs. Pristine experiences can be simple or complex, clean or messy. This usage of “pristine” experience is similar to calling a forest pristine—unaltered by the park service’s asphalt or the loggers’ clearcuts. “Pristine” connotes natural and not specifically altered; pristine does *not* connote clean or pure (a pristine forest is often mucky or brutal).

Pristine inner experiences are directly apprehended phenomena, *not* theoretical, presumed, or inferred constructs. Pristine inner experiences are *not* cognitive processes, *not* brain structures, *not* personality traits, *not* mental functions, *not* self-concepts. Pristine experiences are phenomena that directly present themselves at particular moments.

For example, at a particular moment “Felicity” is reading F. Scott Fitzgerald’s story “Winter Dreams.” At that moment she feels a stabbing pain on the surface of the front, upper middle of her left thigh. This pain occupies her at that moment, is her pristine experience at that moment. The reading presumably continues, presumably activates some sort of language processor, presumably is comprehended, but none of that reading, processing, or comprehension is part of her pristine experience at that moment. The pain is her pristine experience at that moment.

A few minutes later, while reading the “Winter Dreams” passage, “Mr. McKenna said I was to wait here till you came,” Felicity sees in her imagination her friend McKenna, sees McKenna’s blonde hair and face from about a 45 degree angle. The innerly seen McKenna is Felicity’s pristine experience at that moment. That Felicity continues to read with comprehension is *not* part of her pristine inner experience at that moment. That the innerly seen McKenna is Felicity’s female friend whereas the “Winter Dreams” McKenna is a male caddymaster is *not* part of Felicity’s pristine experience at that moment.

Pristine experience changes rapidly: after a few seconds the pain did not figure at all in Felicity’s pristine experience. Pristine experience is not limited by space or time. Felicity hasn’t seen her friend McKenna for some months and McKenna is currently on the other side of the continent. Pristine experience may be unrelated, only tangentially related, or directly related to the main task in which the person is engaged. Felicity’s pain has nothing to do with “Winter Dreams”; her seeing of McKenna’s face is related to the story but only by coincidence of the story character’s name.

As those examples illustrate, pristine experiences are specifically, directly, unambiguously apprehended: Felicity at the first moment is directly experiencing pain, is *not*

directly experiencing the “Winter Dreams” story, is *not* seeing an image of the Eiffel Tower, is not deciding where to go for dinner tomorrow night; the pain she experiences in her front upper middle left thigh and nowhere else. At the second moment Felicity sees her friend McKenna, is *not* seeing Mr. McKenna from the story, is *not* remembering the movie *The Godfather*; she sees McKenna from an oblique angle, *not* straight on. Hurlburt (2011, Ch. 17) argued that pristine experience might be called “radically non-subjective” to indicate that pristine experience is not the result of subjective impression but of direct apprehension—she directly feels the pain, directly sees McKenna.

### **Descriptive Experience Sampling in brief**

DES is less a method than a set of principles for how to explore pristine inner experience, principles that are aimed at submitting to the constraints that such exploration imposes. However, those principles have methodological ramifications. Here, we first briefly describe DES as it is typically practiced and then discuss the constraints that lead to DES. Suppose, for the sake of concrete specificity, that DES investigators (call them “Russ,” “Chris,” and “Prentice”) undertake to explore the pristine inner experience of “Felicity.”

Felicity wears a random beeper in her natural environments. The random beep cues Felicity to pay immediate attention to her inner experience that was ongoing at “the moment of the beep” – the last undisturbed moment before the beep interrupted her. Felicity is immediately to jot down in a notebook (or otherwise record) the features of that ongoing experience.

Within 24 hours after collecting (typically) six such samples, Felicity meets with Russ, Chris, and Prentice for an “expositional interview” designed to help Felicity provide faithful descriptions of the sampled experiences and to help Russ, Chris, and Prentice grasp her

descriptions. The questions in that interview are always some variant of what Hurlburt and Heavey (2006) called the one legitimate question about inner experience—“What was in your experience (if anything) at the moment of the beep?”—and follow-ups thereto.

Within 24 hours of the expositional interview, one investigator (say, Prentice) prepares a written contemporaneous characterization of the ongoing inner experience at each sampled moment and circulates that description to Russ and Chris for their commentary, amplification, disagreement, and so on. If there is disagreement, Russ, Chris, and Prentice explicitly examine the disagreement, often together consulting the video of the interview. That process may resolve the disagreement or the disagreement may remain unresolved; either way the contemporaneous characterization is revised, either resolving the disagreement or ensuring that all sides of the disagreement are honored in the description. This contemporaneous characterization is “raw” in the sense that there is no attempt to polish it; instead, all potential understandings (including contradictory potential understandings) of the sampled experience are explicitly kept alive in the raw characterization. The aim of this process is *not* consensual agreement; instead, Russ, Chris, and Prentice are each individually responsible for ensuring that the raw characterization conveys his own contemporaneous apprehension of the beeped experience, including characterization of any alternative viewpoints, misgivings, disagreements, skepticisms, and so on. That is, each investigator who was present at the interview has the responsibility to be fully committed to the raw contemporaneous characterization. For Chris to be fully committed means that his take on Felicity’s at-the-moment-of-the-beep experience, whether unanimous, majority, or minority, whether confident or sketchy, should be explicitly present (but not necessarily dominant) in the raw contemporaneous characterization of that sample.

Thus the raw contemporaneous characterization of each sampled experience is *not* intended to be a high fidelity description of the experience but rather a messy collection of potential bits that *might* reflect Felicity's experience. The messiness of this characterization honors the reality of the situation: Russ is not sure that Felicity has apprehended her experience in high fidelity, and neither is Chris nor Prentice, each to his own level of skepticism; Russ is not sure that Felicity has described her experience adequately and neither is Chris nor Prentice, each to his own level of confidence; Russ may have several simultaneous competing ways that Felicity's experience might be grasped, and each should be honored, and the same for Chris and Prentice; Russ may have presuppositions that warp his apprehension of Felicity's account, and hopefully one or both of Chris and Prentice will not share those presuppositions and therefore have an unwarped (or differentially warped) take on that detail; and so on. All such threads or potential threads should be laid out in the raw contemporaneous characterization as a way of "keeping all the balls in the air." As sampling progresses in subsequent sessions, one or more of those threads might become clarified (*That's* what Felicity meant when she said...), and the raw contemporaneous characterization might then have a new editing. At any point, video of the original interview may be reviewed.

The natural-environment-sample / expositional-interview / raw-contemporaneous-characterization sequence is iterated (successively improved) over a number of days (typically four to eight).

When all (typically four to eight) of Felicity's natural-environment-sample / expositional-interview / raw-contemporaneous-characterization sequences are completed, Russ, Chris, and Prentice meet for a characterization review where they discuss, one at a time, each of Felicity's sampled experiences. The recollection of each sample is reawakened, aided by the raw

contemporaneous characterization, but now influenced by the close proximity of the discussions of all the other samples. The object is to bring all the sampled experiences into juxtaposition with each other. It is quite possible that discussion of a later sample will alter the perspective on an earlier sample. For example, an early raw contemporaneous characterization might have noted that Felicity said that she was talking to herself at the moment of the beep but that her manner of describing led Russ to be somewhat skeptical of her account; later sampling might clarify that skepticism, either revealing that Felicity has now honed her skill at reporting inner speaking or leading to the conclusion that she had had a presupposition that overemphasized inner speaking.

The raw contemporaneous characterizations are constraints on the retrospections in this characterization review process. If a thread is not present in the raw contemporaneous characterization, then Russ *cannot* claim retrospectively to have had a contemporaneous hunch about that thread—no retrospection without contemporaneous evidence. However, if the characterization review discussion suggests that a raw written characterization has oversights or distortions, then the video of the original interview can be re-consulted and may provide evidence that was originally not incorporated into the raw contemporary characterization.

That is, the object of the characterization review is to encounter all of Felicity's sampled experiences in light of all her other sampled experiences. The raw contemporaneous characterizations are constraints on that process, tools that should be useful to the process, but they are not themselves data in that process. The object is to encounter the experiences, not the description of the experiences.

Following the characterization review, Russ, Chris, and Prentice each independently write an informal characterization of the salient characteristics of Felicity's experience. After all

have written independently, each reviews the others' characterizations, and if there is substantial agreement, then one of them (say, Prentice) writes a draft of a more formal description of the salient characteristics of Felicity's experience and circulates that to Russ and Chris. Russ and Chris ensure that this draft has incorporated all the features of their own informal characterization, and if not they revise it until it does so by adding whatever comments seem appropriate, and then circulate that commented draft back to each other and to Prentice. This revise and recirculate process continues until agreement is reached or minority opinions are clarified and incorporated in the document. The aim of this process is to produce a high fidelity written description of the salient characteristics of Felicity's sampled experiences. Features that occurred in only a few samples are generally not described. That is, many threads that were described in the raw contemporaneous characterizations do not make their way into the final salient characteristic description (those "balls in the air" have dropped out of sight).

It is possible that the final description will contain disagreements about salient characteristics or acknowledge ambiguities in those descriptions.

Felicity may be one participant among several who have a common feature (psychiatric diagnosis, for example), in which case the salient characteristics of the entire group are examined.

### **Constraints**

Despite being immersed in pristine inner experience in every waking moment, and despite its radical non-subjectivity and direct apprehension, and despite many philosopher's claims to infallible access (Schwitzgebel, 2007), DES has found that many (perhaps most) people don't know the characteristics of their own pristine experiences (Hurlburt, 2011). Even if

they do know those characteristics, the private nature of experience entails that verbal description is unlikely to be well differentiated (Hurlburt & Heavey, 2001). As a result, it is likely that neither retrospective interviews, questionnaires (Hurlburt & Heavey, 2015), nor introspection (Hurlburt & Schwitzgebel, 2011a) will apprehend or describe pristine inner experience in high fidelity.

Any attempt at apprehending and describing pristine experience in high fidelity must submit to the constraints that such an endeavor imposes (Hurlburt, 2011). Hurlburt discussed a hundred such constraints and how DES submits to them; we condense that discussion here.

*Cleave to pristine experience.*

DES aims at apprehending natural occurrences—experienced phenomena in their pristine state, unspoiled by the act of observation or reflection, free of any artificial interference by the investigator. That constrains us to investigate Felicity’s phenomena in their natural habitat—that is, in Felicity’s natural environments: experience in contrived situations such as a psychological laboratory may be different.

The entire DES process is designed to cleave (“to adhere firmly and closely or loyally and unwaveringly”; Merriam-Webster) to Felicity’s experience that was ongoing at the moment of the beep. DES trains Felicity to notice the pristine experience that was ongoing at the moment of the beep; and to eschew discussion of all else. That is, Russ, Chris, and Prentice will not discuss the history of experiential events unless some history is necessary to grasp the ongoing experience. They will not discuss putative causation for experience unless causation is directly experienced (which is rare). They will not discuss the significance of experience, nor its typicality or unusualness, and so on. Cleaving to experience is a performance art because Felicity

likely is not skilled at focusing on pristine experience (or skillfully veers away from it) and will require facile and firm redirection.

***Bracket presuppositions.***

A presupposition is a preconception, something taken for granted. Presuppositions are notions about the world so fundamental that they exist prior to critical examination. Presuppositions are accepted without controversy as being true; they shape perception, behavior, and affect without the fact of that shaping being noticed or recognized (Hurlburt & Heavey, 2006).

Most people have strong presuppositions about the nature of inner experience in general and their own in particular, and these presuppositions interfere with their ability to apprehend their own phenomena.

People are blind to their own presuppositions, cannot be trusted to be even-handed about their presuppositions (Hurlburt, 2011; Hurlburt & Schwitzgebel, 2011b). Any attempt at apprehending pristine inner experience with fidelity is constrained to accept this human frailty and to develop methodological procedures to help contain it.

Presuppositions operate for both investigator and participant. The investigators' task is not only to "bracket" their own presuppositions but also to help the participant bracket hers. Bracketing presuppositions (following Husserl, 1913/1982) means suspending or putting out of play a priori views of the way phenomena or processes occur, allowing phenomena to be apprehended as they present themselves.

Bracketing presuppositions is exquisitely difficult because people are specifically, particularly blind to their own presuppositions and blind to their own blindness, typically

stalwartly elevating that blindness to a virtue. Felicity's presuppositions are based on *Felicity's* history, *Felicity's* experiences, *Felicity's* environment, *Felicity's* reality, *Felicity's* desires, and she will likely be exquisitely skilled at hiding from herself the operation of those presuppositions. Presuppositions are “pre” – they operate prior to all cognition and analysis. Felicity takes them for granted so thoroughly that the world could not possibly be any other way; and they are insidious, sneaky, and attractively seductive – they aim directly at Felicity's particular vulnerabilities and weaknesses. As a result, DES believes that it is necessary to work relentlessly, effortfully, repeatedly, and fastidiously at the task of bracketing presuppositions (Hurlburt & Heavey, 2006, Ch. 10).

For example, DES chooses *at random* the moments of experience to be examined—DES discusses randomly selected experiences, not experiences that (unknowingly) somehow align with presuppositions. Part of that randomness is the cleaving to experience that was ongoing right at the moment of the beep—we are not allowed to choose a (probably presupposition-aligned) experience that is merely in the vicinity of the beep.

Part of Russ's, Chris's, and Prentice's skill is to maintain a level playing field for Felicity's descriptions. For example, they will ask non-leading questions or give alternatives that lead in a variety of directions. However, if Felicity has evidenced some presupposition (e.g., that all thinking is in words), Chris might provide some leading commentary (e.g., “Felicity, your thinking may well be in words, but we have observed some examples where thinking is not in words, so we should be open to that as a possibility”) if he deems it necessary to counterbalance what appears to be potentially an already tilted playing field. That is, the interviewer's skill is to help Felicity bracket presuppositions (to leave equal room for any characteristic of a phenomenon until the characteristics are confidently observed and described), not merely to ask

non-leading questions. Hurlburt and Heavey (2006) and Hurlburt and Schwitzgebel (2007, 2011b) discussed the importance of and skills required for this level-playing-field questioning.

The one legitimate question about inner experience: “What was in your experience (if anything) at the moment of the beep?” is an “open-beginninged” (Hurlburt & Heavey, 2006, Ch. 8) question, again as a way of bracketing presuppositions. Most non-DES queries about experience specify the “beginning” of the question: they say, “tell me about your inner speech” or “tell me about your imagery.” Such questions presume that inner speech or imagery (the beginning of the question) exists; that presumption is a presupposition. Part of the art of DES is to allow space for any phenomena without first pointing in a particular direction.

The effort to bracket presuppositions affects every phase of the DES process. For example, DES uses co-interviewers because different interviewers are likely to have different presuppositions, and what Russ is blind to, Chris may see easily. DES returns to the video of samples where disagreement might occur so that presuppositions may be confronted in concrete instances. The raw contemporaneous characterization is designed to be messy, so that Chris can question Russ’s take on experience and explicitly expose that disagreement without the necessity of immediate resolution, thus providing a toehold for subsequent bracketing (see the “iterate everything” section below). The requirement that, following the characterization review, each investigator *independently* write an informal characterization of Felicity’s experience is again a way of potentially explicitly exposing presuppositionally driven differences, as when Russ writes one thing and Chris and/or Prentice writes another. Identifying such differences is a first step toward bracketing.

***Co-investigators.***

DES views the participant as a co-investigator. Felicity has something DES needs – access to her inner experience; Russ, Chris, and Prentice also have something DES needs – skill and expertise in exploring that inner experience. Together, as indispensable partners, participant and investigators might apprehend experience in high fidelity, something neither can likely do alone. DES takes that co-researcher relationship seriously, encouraging Felicity to shape the investigation by suggesting particular lines of questioning, suggest particular situations to investigate, and so on. DES is therefore a first-person-*plural* method: Russ, Chris, Prentice, and Felicity *together* examining Felicity’s inner experience and evaluating her/their characterizations thereof.

***Manage (minimize) retrospection.***

Pristine experiences may be (and usually are) evanescent, and, like dreams upon waking, forgotten shortly after their occurrence. After a few minutes or so, it is likely that Felicity would have completely forgotten that she had felt pain in her thigh or innerly seen her friend McKenna, and any retrospective report that Felicity might give about her experience would systematically overlook those experiential events. Any high fidelity investigation of experience is constrained to manage the distortions caused by retrospection. DES manages retrospection in at least four ways. First, it asks Felicity to jot down (or otherwise record) notes about her at-the-moment-of-the-beep experience immediately—while traces of it are still available in short-term memory. DES accepts that even contemporaneous reporting requires retrospection, and that retrospection back even a split second is still a retrospection, is still a disturbance of the pristine experience. DES is rather like parachuting into a pristine forest and reporting what is there: certainly the parachute landing disturbs some aspects of the forest—small animals scurry to invisibility—but some (many, actually) forest features can be apprehended and described with fidelity.

Second, the expositional interview is conducted within 24 hours of the sampled experience. DES has found repeatedly but informally that 24 hours is generally satisfactory, but where circumstances suggest (as with children or the elderly), expositional interviews are conducted immediately after the beep. Third, the raw contemporaneous characterizations of each sample are written within 24 hours. Fourth, the informal characterizations that are written by each investigator at the end of a participant's sampling are written within 24 hours of the characterization discussion.

***Investigate experience, not words.***

The aim of DES is to describe with high fidelity the experience that was present to Felicity at the moment of the beep. Its aim is *not* to describe what Felicity *says* about her experience because DES accepts that Felicity is likely to mischaracterize her experience. Russ, Chris, and Prentice will work to help Felicity become a more faithful describer of her experience, and will not hold her early mischaracterizations against her.

Russ, Chris, and Prentice are therefore sensitive not merely to what Felicity says, but also to how she says it, to what she doesn't say, to her tone of voice, to her word choice, to her gestures, blushes, stammers, hesitations, and so on. They listen/watch for indications that Felicity may not be skillfully describing pristine experience, that she may be captured by a presupposition, that she may not understand a question, that she may be motivated to theorize, avoid, amplify, and so on. The interviewer's task is to help keep the conversation cleaving to experience at the moment of the beep, by asking for clarification where things are ambiguous, by redirecting back to pristine experience when conversation drifts to theory, to generality, and so on.

For example, Russ, Chris, and Prentice are sensitive to Felicity's use of "subjunctifiers" (Hurlburt & Heavey, 2006): expressions (e.g., "maybe it...", "it was as if...", "well, I don't know, but..."), gestures, hesitations that suggest that experience is not being straightforwardly described. People who are describing pristine experiences generally speak in simple declarative sentences (e.g., "I was saying to myself, "Get a Coke!"; or "I felt a squeeze in my heart"). People who are not describing a specific, manifest phenomenon often signal that non-specificity by using a subjunctive, rather than a declarative sentence ("I was *sort of* saying that I should get a Coke"). The DES interview inquires further to determine, for example, whether "sort of saying" means "innerly saying" or "thinking without really saying anything."

It is striking that DES participants, even linguistically unsophisticated participants, are consistently skillful when they switch back and forth between declarative and subjunctified sentences. Hurlburt (2011) has suggested that the lower the density of subjunctification, the better the description, and that density of subjunctification is a good clue to fidelity of expression, a clue that needs to be examined and confirmed or disconfirmed.

Unlike other kinds of interview (psychodynamic, for example), Russ, Chris, and Prentice do *not* attempt to interpret or explain Felicity's ambiguities, contradictions, inconsistencies between word and gesture, and so on, nor do they ask Felicity to interpret or explain. Instead, they accept that an internally inconsistent sample may well suggest an experience that was not grasped in high fidelity, and therefore they aim the interview at clarification and bracketing presuppositions so that if a similar experience occurs on some subsequent sampling day, it might be grasped described with higher consistency and therefore likely higher fidelity (see Iterative everything below).

The writings by the participant (and the investigators) are never themselves the target of investigation. Felicity's jottings are notes from Felicity to Felicity, fashioned by her to assist her in recalling the experience that was ongoing at the moment of the beep. Russ, Chris, and Prentice never ask to see those notes; to do so would focus her on the note characteristics, not on the experience itself. Occasionally they may give note-taking advice (e.g., "if words are present in your experience, it might be helpful if you would write those words down"), but that is always offered in a collegial, not an investigative way.

The raw characterizations written by the investigators are never examined for their word content. Those characterizations are tools that point back to experience at the moment of the beep, and if the tool is not accurate, then the investigators return to the video of the interview.

***Value the idiographic.***

Pristine experience always presents itself to one and only one individual: the thigh pain is Felicity's, no one else's. Felicity's experience may or may not be similar to that of other individuals, but that does not at all enter into Felicity's experience at the moment of the beep. Felicity has a pain in her thigh, *not* a pain in her thigh *that is like (or unlike) other people's pain*. It follows that a high fidelity description of Felicity's experience must treat that experience as if it were one of a kind.

Characterizing experience is therefore bottom-up: DES tries to apprehend a series of individual experiences in high fidelity, each apprehended in its own idiographic particularity. Then, and only then, might nomothetic or group-level characterizations be contemplated.

***Iterate everything.***

As we have seen, the expositional interview asks one question (“What was in your experience (if anything) at the moment of the beep?”) and clarifying follow-ups, but (also as we have seen) participants typically don’t know the characteristics of their own experience and are unskilled at apprehending and describing those characteristics. As a result, on her first sampling day, even if she is motivated to respond, Felicity will likely *not* describe the pristine experience with fidelity. Instead, she may have tried to observe her experience in the minute or so near the beep, or perhaps after the beep, rather than at the moment of the beep. Or instead of describing experience, she may give a faux generalization (e.g., “I always feel angry when he is in the room”; Hurlburt & Akhter, 2006), or state a self-characterization (e.g., “I like to read”), or speculate about causation (“I was tired because I was up studying last night”), or describe a fact of the universe (“I was sitting with my legs crossed”), or describe behavior (“I was playing chess”), or describe a presupposition about experience (say “I was saying...” when there were no words ongoing), or describe the environment (“the room was noisy”), or so on. None of those is a description of Felicity’s pristine experience at the moment of the beep, even though the interview question was about pristine experience at the moment of the beep and Felicity is trying to answer honestly.

As a result, DES will discard Felicity’s first-day reports and consider her first expositional interview to be training for her second sampling day. Because of this training, Felicity’s second-sampling-day skill at apprehending her pristine experience is likely to be substantially improved, so the second day’s expositional interview can be partly data collection and partly training for the third sampling day. Her third sampling-day’s skills are typically again improved, allowing her third expositional interview to provide increased fidelity of description.

DES calls this gradual acquisition of apprehensional and descriptive skill “iterative” (Hurlburt, 2009, 2011) in the same sense that a mathematician uses the term: successive approximations that ultimately become satisfactorily close to the goal. That is, iteration is not merely repetition and not merely data acquisition on multiple occasions; it is the gradual but systematic increase of the skill in apprehending and describing pristine experience in high fidelity.

Iteration is thus on-the-job training throughout the data-acquisition process, made possible by the stream of newly sampled, concretely specific experiential events. DES interviews of Felicity never plow old ground but always are intimately revitalized and invigorated by newly sampled experiences, each apprehended by an increasingly nuanced Felicity and described by her to an increasingly receptive Russ, Chris, and Prentice. Every new experience provides a fresh perspective, an origination opportunity to refine distinctions, to delimit characterizations, to reconsider descriptions, to contrast the present experience with one that has gone before.

The opportunity for new samples on subsequent days eliminates the pressure for completeness of understanding of any one sample. An interview about a sample may conclude with Felicity’s saying something like, “I’m just not sure whether words were present or not,” in which case Chris might respond “That’s great! We value being candid when you’re not sure. Maybe a similar experience will occur at some later sample; if so, then maybe it will be easier for you to notice whether words are there. Or maybe not. Either way will be fine with us.”

The effort at iterative improvement applies to all aspects of DES. Skills need to be acquired/improved by both participant and investigator; DES therefore creates a situation where all skills may improve with practice, and provides specific, concrete occasions (that is, new samples, as many as desired) for that practice.

***Concede imperfection.***

DES accepts that inner experience is more detailed, more nuanced, more layered than can be conveyed. DES aims at the last undisturbed moment before the beep, but it accepts that that moment is not actually undisturbed: the beep has occurred. DES accepts the limitations of apprehension and communication. Therefore the goal of DES is fidelity, not accuracy (which is accepted as unattainable). Fidelity can be increased through the iterative exploration of new experiences, but that still falls short of complete accuracy.

***Cherish confrontation.***

A corollary to the acceptance of iterative improvement of tomorrow's skill is the value of accepting the inadequacy of today's skill. A corollary to the fact that presuppositions are always out of sight is that DES investigators will not recognize their own idiosyncratic sensitivities and blindnesses, will not have perspective on how their apprehensions of experience may be blind or warped from the original experience. The stream of newly sampled, concretely specific experiential events provides the opportunity for the exposing of presuppositions. DES therefore maintains a culture of constructive confrontation about the concrete occurrences of experience. It encourages investigators to disagree, to articulate discrepant slants on a particular experience, and then to examine those discrepancies out in the open, often returning to the video of the original interview. As part of the iterative process, the object is not to prove oneself right or the other wrong, but to explore the discrepancy in light of the specific concrete occurrence of the particular sampled experience. The discrepancy may or may not be resolved, but either way, the discussion has the potential to expose a presupposition that can later be bracketed. DES recognizes that presuppositions are stubborn, and several iterations of similar confrontations,

each concretized by the specifics of the newly sampled experience, might be required for real bracketing to occur.

This bringing out into the open the potential lack of skill, perhaps repetitively, is, of course, not an easy interpersonal endeavor, and DES tries to make it constructive by (a) accepting that the valuable confrontations are always specific: about  $X$  beeped experience at time  $t$  I understood  $Y$  about Felicity's experience, whereas it seemed that you understood  $Z$ ; and (b) recognizing that if I spot what I take to be your blind spot, it is possible (perhaps likely) that the real issue is my hypersensitivity (or a combination of blindness and hypersensitivity). Humility is desirable.

## **Applications**

DES can be used to investigate the frequent characteristics of pristine experience. For example, Hurlburt, Heavey, and Kelsey (2013) considered inner speaking, showing that it was not ubiquitous (as is commonly assumed) and that there are wide individual differences in frequency (ranging from near zero to nearly 100%) and phenomenological characteristics (e.g., in one's own or another's voice, in the completeness of the expression). Hurlburt and Akhter (2008) described unsymbolized thinking, showing that many people experience explicit and differentiated thoughts that do not include the experience of words, visual images, or any other symbols (a phenomenon considered impossible by many). There are great individual differences in the frequency of unsymbolized thinking. Hurlburt, Heavey, and Bensaheb (2009) described sensory awareness, the direct focus on some specific sensory aspect of the inner or outer environment, showing that some people engage in this kind of experience nearly always and others nearly never. Heavey, Hurlburt, and Lefforge (2012) described feelings, the experience of emotion. They showed, for example, that feelings are not ubiquitous (as many have held), and

that sometimes feelings are experienced with bodily aspects but at other times are entirely “mental” (considered impossible by many).

DES can be used to investigate inner-experience characteristics associated with externally observable features of behavior. Hurlburt, Koch, & Heavey (2002) demonstrated that people who talk rapidly have complex inner experience, including vividly complex visual imagery and multiple simultaneous experiences. Mizrachi (2010) showed that left-handed individuals experienced fewer words than did right-handed individuals (less inner speaking, for example), and when words did appear in experience, it was for their non-semantic characteristics (e.g., the shape of the particular font or the sonority of the utterance) rather than their semantic or communicated meaning.

DES can be used to explore the inner-experience characteristics associated with psychiatric disorders. For example, Hurlburt & Melancon (1987) described the “goofed-up” images of a woman with schizophrenia—images that were bent, or arbitrarily cut off, or splattered with black. Hurlburt (1990) described individuals with schizophrenia whose experienced affect was hyper-clear (rather than blunted as is commonly assumed). Hurlburt (1993) described the lack of figure-ground phenomena in a woman with borderline personality, noting the chaotic ramifications of figure/ground disturbance. Hurlburt and Jones-Forrester (2011) described the multiply fragmented experience of women with bulimia nervosa; Hurlburt (1993) described cases in bulimia nervosa where the degree of experiential multiplicity increased before purging and dramatically decreased immediately after purging (a phenomenon unknown in the bulimia nervosa literature). Hurlburt (1990) described a cyclothymic individual whose inner experience when hypomanic included nearly continuous vivid visual imagery but when

depressed included no visual imagery at all; furthermore, prior to sampling the individual had no knowledge that his experiential characteristics altered dramatically from one state to the other.

Despite the intensity of DES investigations, Kühn, Fernyhough, Alderson-Day, and Hurlburt (2014) showed that DES can be used in the fMRI scanner to investigate experiential concomitants of brain activity. They showed that for one individual, inner speaking involved more activation of left inferior frontal gyrus than did inner hearing of her own voice.

### **Summary**

Descriptive Experience Sampling (DES) is an approach to apprehending and describing pristine inner experience, an approach that submits to the constraints that such exploration imposes.

DES falls short of perfection because no technology for capturing/transporting/importing experience directly from one person to another exists. DES makes no pretense about the fact that it falls short; all methods in science fall short of their ideal. The DES aim is not perfection, but to stage an attempt at apprehending a glimpse of experience in high fidelity, an attempt that submits to the constraints that such apprehension imposes (Hurlburt, 2011). That is, any method that seeks to apprehend the pristine inner experience (of, say, Felicity) must accept limitations of Felicity's abilities: that Felicity does not (at least initially) know the characteristics of her own experience; that Felicity's experience is evanescent and easily forgotten; that she has little or no skill at describing experience; that she has little or no reason to grasp how or whether her own experience might differ from that of others; that she is likely to confuse causation and/or narrative for experience; that she has (probably incorrect) presuppositions and expectations about the nature of experience that will blind her to actual experience; that she is likely to want to try to

please the investigator rather than describe experience; that the sheer volume of pristine experiences can be overwhelming (if one assumes, conservatively, an experience every 3 seconds, that's 20,000 per day); and so on.

Any method that that seeks to apprehend pristine inner experience must also accept limitations of the investigators: that they have presuppositions that cloud their ability to apprehend Felicity's experience, and that those presuppositions may amplify Felicity's presuppositions; that external pressures (toward productivity, of economics, of peer pressure) may distract from pristine experience; that they have or may have little skill in apprehending Felicity's particular kind of experience; that they, like the scientific community, does not have a well-developed language for describing experience; that the scientific community values theory and has little appetite for description; and so on. Any attempt at apprehending pristine experience in high fidelity must forthrightly accept all those constraints and more, must develop a systematic, rational, realistic way of operating in the company of all those constraints. DES is one such attempt that focuses on randomly selected moments of pristine inner experience and that iteratively improves the Felicity's and the investigators' to apprehend and describe Felicity's experience.

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### **Biographical Note**

Russell T. Hurlburt is Professor of Psychology at the University of Nevada, Las Vegas. He pioneered the investigation of inner experience (thoughts, feelings, etc.), inventing (1973) the beepers that launched “thought sampling.” He originated “Descriptive Experience Sampling” (DES), the attempt to apprehend inner experience in high fidelity, leading to five books including *Investigating Pristine Inner Experience: Moments of Truth* and a special issue of the *Journal of Consciousness Studies* (2011) was devoted to his work.