

Scales of Problematic Communication and Thinking

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The Scales of Problematic Communication and Thinking quantify disrupted, disorganized, or illogical thought processes on continua that ultimately are indicative of psychotic level disturbances in thinking and conceptualizing. The scales assess thought disturbance on three dimensions: Disorganized and Confusing Communication, Illogical Verbal Justification, and Incongruous Perceptual Combinations. Each dimension is rated independently of the others on a 6-point anchored scale, where a score of 0 is assigned to an effective, clearly communicated, coherent, and logical response, and a score of 5 is assigned to a response containing marked problems in language, communication, logic, reasoning, or conceptualization. At the most basic level, Disorganized and Confusing Communication involves oddities in describing a response, Illogical Verbal Justification involves oddities in justifying a response, and Incongruous Perceptual Combinations involves oddities in combining visual images and response features. Table 1 summarizes the six scores for the three dimensions, and additional text elaborates each scale point for each dimension. For each dimension, an appendix also provides examples of similar percepts at different levels of severity.

The scales and definitions for the dimensions have been derived from the Cognitive Codes in the Rorschach Performance Assessment System (R-PAS; Meyer, Viglione, Mihura, Erard, & Erdberg, 2011), which were derived from the criteria elaborated by Viglione (2010) for variables in the Comprehensive System (CS; Exner, 2003). The CS variables, in turn, were inspired by earlier foundational work by Rapaport, Gill, and Schafer (1946, 1968), Schafer (1954), and Weiner (1966). The scales also build on conceptualizations advanced by Kleiger (1999, 2017; Kleiger & Khadivi, 2015), who provided consultation to us during scale development.

The new scales reflect increasing evidence that disordered speech and thought processes, as well as all psychotic symptoms, are best characterized as continua (e.g., Dutta et al., 2007), as well as increasing interest in dimensional, as opposed to categorical, assessment and diagnosis of psychotic disorders (e.g., American Psychiatric Association [APA], 2013). For the most part, the Disorganized and Confusing Communication scale more fully quantifies the R-PAS Deviant Verbalization (DV) and Deviant Response (DR) codes; Illogical Verbal Justification more fully dimensionalizes the R-PAS Peculiar Logic (PEC) variable; and Incongruous Perceptual Combinations more fully quantifies the Incongruous Combination (INC), Fabulized Combination (FAB), and Contamination (CON) codes. Importantly, each scale anchors the low end not just by the absence of a problem, but also by the presence of clear logic and communication. Table 1 lists the original CS and R-PAS Cognitive Codes that roughly correspond to scores on the Scales of Problematic Communication and Thinking, with PEC differentiated into those that are mild (1) and severe (2).

Table 1. Scales of Problematic Communication and Thinking

Approximate Score	R-PAS Codes	Disorganized & Confusing Communication	Illogical Verbal Justification	Incongruous Perceptual Combinations
0	None	Communication is clear, easily understood, internally consistent, task focused, and coherently structured. There is no evidence of peculiarity in word use, confusing or nonsensical phrases, or tangential statements. Experientially, the coder understands what is in the response, knows where each object resides, and knows what features of the inkblot make it look that way.	Either the respondent provides no reasoning or any they spontaneously offer has a logical, reasonably complete, stimulus-based foundation qualified to the nature of the task. When present, causal reasoning logically links attributes of the stimulus to justify the object(s) seen without illogically excluding equally plausible alternative objects. There is no strained reasoning, excessive or illogical certitude, or problematic logic.	The perceptual foundation and organization of the response in the inkblot is clearly communicated and logically structured in an appropriately permissive context. Objects and their features are reasonably situated and arranged on the blot in a fully plausible way. No object has incongruous actions, attributes, subcomponent features, or qualities, and no objects are in an incongruous or implausible relationship.
1	None, DV1, INC1, FAB1	Communication is generally clear, easy to understand, internally consistent, and coherently structured. However, there is one mildly confusing element, consisting of a verbal slip, a task irrelevant aside, or an instance in which speech elements lack a clear link (e.g., the assessor must infer the subject of a statement with some uncertainty because it was not stated explicitly).	There is an instance of a) spontaneously offered mildly strained reasoning accompanied by hesitation, uncertainty, equivocation, or humor; b) incomplete reasoning that identifies necessary attributes in the stimulus, but they are not sufficient to justify the conclusion; or c) overly simplistic and concrete reasoning that emerges when provoked by a clarification question.	There is one instance of an object with a mildly incongruous visual feature or action, or two or more objects related in a mildly incongruous manner. However, the response a) is clearly seen and common, as listed in Table 2; b) is playfully or humorously communicated or accompanied by hesitation, uncertainty, or equivocation; c) shows recognition of the incongruous or implausible element; or d) could be plausible but a context is missing.
2	DR1, INC1, FAB1, PEC(1)	Communication is generally clear and easy to understand. However, there is one instance in which communication is challenging to follow, internally inconsistent, digressive, or oddly expressed.	There is one instance of overly simplistic, restrictive, or concrete reasoning spontaneously and unequivocally expressed and transparently based on object attributes or their locations; an instance of more serious excessive certitude; or highly concrete reasoning emerges following a clarification	There is one instance of an object with a mildly incongruous visual feature or action, or two or more objects related in a mildly incongruous or implausible manner. However, it is not common, there is no evidence of playfulness or attempted humor, and recognition of the incongruous or implausible element

Approximate Score	R-PAS Codes	Disorganized & Confusing Communication	Illogical Verbal Justification	Incongruous Perceptual Combinations
3	INC2, FAB2, PEC(1)	Response is somewhat confusing or difficult to follow, either due to more than one lapse in communication or one more extensive lapse. The coder has some difficulty understanding what is in the response, where each object resides, why the respondent is reacting to the response, or what features of the inkblot make it look that way.	question. There is excessive certitude or highly concrete reasoning delivered spontaneously without uncertainty and without qualification, or an instance of more seriously flawed and preposterous logic that only emerges following a clarification question.	emerges in the CP, if at all. There is clear evidence of incongruous perceptual combinations. This may be manifest by more than one instance of distinct and mildly incongruous attributes or relationships, or by a clearly communicated but more prominent lapse in visual coherence, characterized by a jarringly or strangely incongruous or implausible attribute or relationship.
4	DV2, DR2, PEC(2), INC2, FAB2	Communication is notably confused, generally difficult to follow, tangential or digressive; notably distorts the task; or has a clear internal conceptual inconsistency, or a peculiar neologism.	There is severely flawed or preposterous logic spontaneously delivered without qualification, such that the source of evidence is bizarrely incompatible with the inference drawn, there is an absurd linking of concrete blot features to abstract generalizations, or the conclusion is based on unexpressed but highly personalized and peculiar reasoning.	The response contains two or more instances of the markedly incongruous visual attributes or relations that qualify at Level 3, or one instance characterized by primitively bizarre or primitively contradictory elements.
5	DR2, PEC(2), INC2, FAB2, CON	Communication is incomprehensible; it is amorphous, changing, contradictory, or digressive to the point where it is unclear what is in the response. The coder is very confused and has very little to no understanding of what is in the response, where each object resides, and what features of the inkblot make it look that way.	There is more than one instance of the type of spontaneously asserted severely flawed or preposterous logic found with Level 4, resulting in highly contradictory justifications and absurd conclusions.	The response has more than one instance of the markedly incongruous visual attributes or relations accompanied by primitively bizarre or primitively contradictory elements that qualify at Level 4. Alternatively, the response has a blatantly impossible visual structure, such that response objects are visually superimposed on one another and simultaneously occupy the same inkblot region in a markedly impossible way.

Disorganized and Confusing Communication

Overview

Disorganized and Confusing Communication (DCC) relates to many of the linguistic elements of a response that are not directly tied to justifications. It reflects the extent to which a response is clearly communicated, easily understood, internally consistent, task focused, and coherently structured.

At the extreme of psychosis, disorganized and confusing speech can be circumstantial, distractible, tangential, derailed, or incoherent. Single word units can also be used incorrectly or even entirely made-up neologisms. In the speech of people with schizophrenia, neologisms may convey some meaning to the listener because at times they combine parts of meaningful speech into a new word, whereas in other conditions like autistic disorder or aphasia, and at times with schizophrenia, the word may only have meaning to the person who generated it. Linguistically, psychotic speech often lacks referential cohesion or the 'co-referencing' of semantically related words and contents across different parts of speech. Of course, everyone's speech can contain minor occasional lapses, and DCC types (e.g., circumstantiality, neologism) may occur across different disorders. If the DCC scale is notably elevated, the coder may want to review the nature of the problematic speech interpretively and diagnostically.

A DCC score of 0 indicates that the response is easily interpretable for the assessor, with no peculiarity in word usage, confusing or nonsensical phrases, or tangential statements. As such, the respondent's meaning is clear to and easily understood by the assessor, and the response is directly relevant to the task question, "*What might this be?*" Lower scores on this dimension (e.g., 1 or 2) indicate that a response contains one mildly confusing element that does not significantly impede the assessor's ability to understand the response. For the most part, errors qualifying for lower scores convey a degree of inattentiveness or sloppiness in speech. Higher scores (i.e., 4 or 5), on the other hand, reflect more marked failures in communication that subvert the assessor's ability to make meaning out of the response. Two hallmarks of disordered thought processes typically characterize these responses: communication failure and condensation of mutually exclusive linguistic elements. Alternatively, the respondent may distort the task by reacting to it unreasonably and unrealistically or by providing circumstantial responses or rambling to the point that he or she does not readily return to the task problem.

When respondents spontaneously correct lapses in speech that manifest as improper word use, the response generally qualifies for a score one level lower than it otherwise would have. Thus, a minor lapse that would otherwise qualify for a score of 1, would receive a score of 0 if it is spontaneously corrected, and a more salient lapse qualifying for a score of 2 or 3 would receive a score of 1 or 2, respectively, when spontaneously corrected. This stepdown principle does not apply if the lapse occurs in the RP and the respondent does not correct it until the CP.

Coding Criteria

DCC = 0.

A score of 0 is assigned to a response when the communication is clear, easily understood, internally consistent, task focused, and coherently structured. In addition, there is no evidence of peculiarity in word use, confusing or nonsensical phrases, or tangential statements. Experientially, the person coding the response understands what the elements are in the response, where each object identified resides, and what features of the inkblot made it look that way to the respondent.

DCC = 0 examples. The following are examples of responses that would be scored DCC = 0. In each response, the assessor can clearly understand what is in the response, where the response elements reside, the relationship between response elements and subfeatures, and why it looks the way it does.

Card III, RP: *"Looks like two men and they have just released a butterfly that they had in this container right here."* CP: *"(ARR) R: Two men here (D9), looks like they kind of have tuxedos on and this looks like butterfly (D3) that's just flying away, just escaped from this pot right here (D7). (What there makes it look like tuxedos?) R: Just because it looks like they're wearing black suits."*

Card IV, RP: *"[Laughs] I see a monster with very big feet."* CP: *"(ARR) R: It is almost as if the vantage point is from down here (below D1) looking up at him. It is like a depth perception picture that artists draw. These are his feet down here (D6) and his head up here (D3). It's bigger on the bottom, smaller on the top."*

Card IX, RP: *"Looks like gems all around. So pretty, all the different colors."* CP: *"(ARR) R: The different colors and shapes (points to D3, D1, D6). Like different kinds of gemstones. It's very pretty."*

DCC = 1.

A score of 1 is given to a response containing a single mildly confusing element, off-task statement, or mistake in word use in a verbalization that is otherwise clear, coherently structured, and comprehensible. A mildly confusing element is typically an ellipsis when the referent for a statement is implied but there is mild ambiguity as to its source. Off-task statements are instances in which the respondent makes an association that is not tied directly to the task or to the response being generated. In most cases, these involve (a) brief asides; (b) brief parenthetical, humorous, flippant, self-descriptive, or insecure comments; or (c) simple descriptions of personal attitudes or preferences. As long as the respondent returns to the task immediately after making one such statement, the response would be scored DCC = 1. If a personal comment, humorous statement, or aside is directly related to the percept, it would be coded DCC = 0. Mistaken verbalizations at this level often involve idiosyncratic, immature, misinformed, or unsophisticated language; poor syntax; easily understandable redundancies, slips of the tongue, or stilted word use; or closely related word substitutions. Neologisms (words that are not part of standard language) resulting from adding an inappropriate prefix or suffix to the root of a real word or from a sound substitution typically result in a score of 1.

DCC = 1 examples. The following are examples of responses that would be scored DCC = 1, along with brief indications as to why each example would receive this score.

*"I have a very **wide** imagination."* Poor word choice, wrong connotation.

*"I think I **pronounced** that correctly."* Understandable neologism that closely relates to the correct word (pronounced).

*"Something from a **biography** lab. The cell structure."* Misused word that is a phonetically related substitution for the word "biology" based on the context provided by "lab" and "cell structure."

Card II; RP: *"A drawing of someone's face."* CP: *"Yeah, the black looks kinda like a man's beard, and the red could be the eyes, not normally shaped, I mean not human eyes, just like a drawing of a man's face. And then down here, the red could be the tongue sticking out of his mouth and this is his open mouth right here. **Cool computer, are they pretty cheap?** (I'm not sure actually; think maybe around \$200.) R: *Oh, that's cool. I was done* [referring to the response]." Off-task statement involving a brief aside, after which the respondent readily returns to the task.*

*"Another waterfall, I **love waterfalls**."* Off-task statement involving simple statement of personal preference; assuming the respondent does not make a second off-task statement (e.g., "I went

to Niagara Falls once as a kid”), code DCC = 1. Had the respondent said, “I’ve seen a waterfall like this,” it would be a task-focused personal statement and coded DCC = 0.

“How about a bat turning into a butterfly? I guess **it’s** wishful thinking.” Mild ambiguity resulting from the fact that the referent for “it” is not stated explicitly.

DCC = 2.

A score of 2 is assigned to a response containing a single instance in which communication is difficult to follow, internally inconsistent, digressive, or oddly expressed, though otherwise generally clear and easy to understand. The lapse may involve an extraneous elaboration or addition of task-irrelevant information that does not directly address the task question of “What might this be?” or relate to key features of the response. It also may emerge from inconsistency about the sequence of events, such as conflicting statements about what occurred in the past, what is happening in the image, or what may happen later.

For communication to qualify as digressive for a score of 2, at least two statements or ideas should be offered, and the second one should not be closely related to the response and the Rorschach task. For example, the response “*There’s sherbet. Did you know sherbet has no colors?*” would receive a score of 1, because the second sentence is only one step away from the response. However, if the respondent were to add “*I learned that when I worked [i.e., in the past],*” the response would be scored DCC = 2, because work is far enough removed from both sherbet and color that it is considered a second step away from the task. Though not on-task, a verbalization receiving a score of 2 does not significantly undermine or subvert the respondent’s communication and problem solving, and the response overall is comprehensible and relatively easy to understand.

DCC = 2 examples. The following are examples of responses that would be scored DCC = 2, along with brief indications as to why each example would receive this score.

“*He’s all **clowned up** in some kind of a suit.*” Neologism for which a word substitution that cannot be easily inferred; a slang phrase (e.g., “gussied up” or “fined-out”) that was more closely related to “dressed up” or “decked out” would be scored 1.

“*It’s the kind of bug anybody would step on.*” Odd, tangential elaboration spontaneously offered by the respondent.

“*It really looks like a moth to me, the whole thing. Oh, gosh, did you see that movie about the moth-guy? I forget the name, but it was really scary.*” This response drifts away from the task but the response itself is otherwise easily understandable.

“*How about a bat turning into a butterfly? I guess it’s wishful thinking. **There’s too many bats in the world.***” Circumstantial, digressive communication in which two off-task statements are made (i.e., wishful thinking, too many bats), the second of which is not closely related to the task or the response. If only one such statement had been made, response would be scored 1, as illustrated previously.

“*Something, you could see under my microscope, something very small. You know some microscopes are powerful enough to see molecules. **Molecules can also be differentiated if you know how to look at them.***” The communication is digressive due to the respondent making two off-task statements; if only the first statement about molecules had been made, the response would be scored 1.

“*A leaping rabbit... Here. I love rabbits. **I tease my wife about having rabbit stew when I get home.***” Digressive communication in which two off-task statements are made, the second of which is

not clearly related to the task or the response; had the respondent stopped after “*I love rabbits,*” this simple personal statement would be scored 1.

“*The clusteration of red is significant for...*” Communication is oddly expressed due to the respondent’s neologism and stilted, overly formal speech.

DCC = 3.

Key at lower levels (i.e., 1 and 2) is that there is a *single* lapse in communication of which the assessor is generally able to infer the meaning despite some uncertainty, and clarity of communication is otherwise maintained. When multiple lapses in communication or one more extensive lapse in communication are present, a response is given a score of 3. In this case, the coder may have moderate difficulty understanding what is in the response, where the object(s) reside, what occurred when, and what features of the inkblot made it look like that.

DCC = 3 examples. The following are examples of responses that would be scored DCC = 3, along with brief indications as to why each example would receive this score.

“*It looks like a Sumotrian tiger... four feet and even vague stripes. I like those tigers. Don’t you love them? Tigers are beautiful. Actually, all of nature is. I like to get out in it as much as I can.*” In addition to the verbal slip for Sumatran tiger, the focus of the task is lost as the response cascades into a series of associations that lead to digressive speech under the sway of the respondent’s affective reaction to the percept and then to his or her own associations. However, the respondent clearly communicates about the response object itself (i.e., a tiger with vague stripes).

“*Sections of a basket. If it could talk this part would say ‘handle.’*” Inappropriate, task-inconsistent language indicating confused problem solving.

“*A person tipping his **card** in a game of **hands**.*” Two errors in word usage that the respondent neither appears to recognize nor corrects; if the word substitutions were relatively less obvious (e.g., “*a person tipping his paws in a game of hats*”), resulting in greater difficulty on the part of the assessor in understanding the response, a score of 4 would be indicated. On the other hand, if this response was spontaneously corrected in the Response Phase, it would be coded DCC = 1; if the correction was made spontaneously but only after the response was read back in the Clarification Phase, it would be coded DCC = 2.

“*This is a type of bug that no one in this world has ever seen before.*” Nonsensical answer to the question, “What might this be?” Had this response been delivered with a smile and in a humorous tone, a code of 1 or 2 would be indicated, depending on how it was elaborated. For instance, a 1 would be appropriate if the respondent clarified how she or he was unfamiliar with anything that looked like that, e.g., “*In other words, I don’t think any bug actually looks like that.*”

“*The **utensils of an animal**, like a **hand or foot of a crab**. What are those called? The part that snaps together like **utensils**.*” Repeated misuse of a word (“utensils”) that has no clear link to word that probably was intended (“claw”).

“*It’s a giant, Bigfoot, the feet are down here. There’s a snake, or something that he is **testing** over.*” Single lapse in communication, but more difficult to decipher than at Level 2. “Testing” may be a substitute for stepping; however, that is just a guess on the assessor’s part and there is no context to understand the misused word.

“*That’s the butterfly flying that I saw before* [referring to a response on a previous card].” This response is an example of losing the as-if component of the response process, i.e., treating response as if it is real and thus distorting the task. The 10 inkblots are all sufficiently different from each other

that they do not provide a context for believing one is seeing the same object that was seen before, thus leaving the assessor confused about what features of the inkblot made it look like that to the respondent.

DCC = 4.

A score of 4 indicates that communication is notably confused and difficult to follow, tangential, or digressive. The response may contain one or more verbalizations that are unclear or internally inconsistent or contradictory. It may involve reactions to either the card stimuli or the response being produced that have no clear logical foundation and represent task distortions. This also may involve spontaneous, repetitive misuse of conceptually related words or confusing perseverations of concepts, words, word roots, or phonemes that obscures meaning. At other times, a respondent may offer a peculiar neologism that cannot be decoded or that involves contradictory components. When the respondent does not correct, qualify, or explain, even during the Clarification Phase, such verbalizations typically qualify a response for a score of 4.

DCC = 4 examples. The following are examples of responses that would be scored DCC = 4, along with brief indications as to why each example would receive this score.

“An ancillarian vestige pig.” Peculiar neologisms, resulting in a confused phrase that the assessor would be unable to make sense of.

“The outside lookers, the onlookers of the outside.” Perseveration of the roots “out” and “look,” resulting in a communication failure.

“Something pointy on this creature’s head. Formation with something formatted out of its head right here.” Confused communication resulting from the repetitive misuse of a word root in stilted, overly formal manner.

“Blood. Now, it seems to me that I cut my finger on a glass, but I don’t know how it was cut, but that’s my alibi.” Tangential, nonsensical statement.

“Something hiding. If you tell the truth, you won’t get in trouble. But if you’re sneaky and something like these people, you’ll realize it.” Notably confused communication with elaboration that strays from task and invokes multiple unstated referents.

“Oh my goodness, maybe this is a bug of some kind with blood. How did that happen? I don’t like the red though. It looks like blood.” Excessive, though not especially intense, affective elaboration that cannot be justified by the inkblot or by the reality that it is an inkblot and “that” did not actually happen.

DCC = 5.

A score of 5 is given to a response containing markedly confused communication or off-task communication failures. In general, the response is made incomprehensible by communication errors like – though more severe than – those described for a score of 4. A response may be marked by fluidity, such that something perceived as one thing at one moment is seen differently in the next; rambling to the point the respondent digresses entirely from the task; or confusing, contradictory connotations. Alternatively, a response may involve illogical and striking affective reactions, behavioral interactions with the response, or verbalizations that imply that the respondent is treating the response as if it were real. Overall, the assessor has very little to no understanding of what is in the response, why it is being responded to the way it is, where object(s) reside, and what features of the inkblot made it look like that.

DCC = 5 examples. The following are examples of responses that would be scored DCC = 5, along with brief indications as to why each example would receive this score.

"This looks kind of scary too. The colors all look like they're supposed to make it more subdued and so that you don't notice it, but I do. Like it was trying to hide and sneak up on me." Suspicious attribution of intentionality to the inkblot blot features, constituting a pathological departure from the framework of the task.

"It's a little baby coming out of his mother, but she didn't really have a little baby even though she is a mother." Response marked by contradictory components that reflect markedly confused problem solving and conceptualization.

"Two walking animals with their pillows right here, they got a rat-snake, ears and their shame here, I see them down home, down here. They had a house in the woods with a rat and snake. I took the broom..." Fluid response in which the respondent digresses from task in nonsensical manner that is incredibly challenging or impossible to follow.

"Here's the Liberty Bell; it could be one bell, or it should be three bells. I'm not sure which. A head of a bear but it may be cracked..." Fluid response in which something perceived as one thing at one moment (Liberty Bell) is seen differently in the next (head of a bear).

Card VII; RP: *"A transplant chicken liver lung. A lung liver transplant. Lung liver kidney transplant."* CP: *"(ARR) R: Those are chicken liver lung transplants [traces finger around D5]."* The preservative repetition makes the communication impossible to understand.

Card VIII; RP: [Looks at the card for a minute, maybe two.] *"On or off the clock is a rattlesnake with its fangs, and toes right here and they both are connected with the color change right here and here, can't see the bottom of the mouth and it's just being swallowed here as the deterioration from the rattlesnake and the top of his nose is right there. Yeah, these open spots are just where he's moving his teeth into his mouth and you're able to make the picture with the toads, one end, I'm thinking it's right here, wherever those are. One two three four, fangs, and then there's the fangs that got both feet, the venom has taken effect to the body of the turtle, not turtle, toad, not a free agent but it's got a goofy shade around the eyeball and it's got poison around here, it has a scary rattlesnake, has four inches, well right there is the size of the rattlesnakes jowls, they don't go too far into the left of the snake pit, it's hooked onto here which is the bunk which means it probably went back and forth with the ponds, leaves trash in humans houses, very busy, but right here is where I seen the jowls of the rattlesnake, very familiar to me I saw it on a TV show the other day, rattlesnakes going after a guy in a balloon, it definitely went to eat the man in the balloon but that's the show, mishandled it I guess. Like a rattlesnake, both of them, top and bottom are I wouldn't say big but decent size, I've seen some big, huge ones before, that's a very fast way to feed the snakes, the toads, it's like the streptococci, one of the things they use, or else the body keeps breaking down, breaking down, sometimes they need a shock, in the tropics. Yeah that's what this is, that's that and here's the shadow at the top of the mouth up there and that's the memory and they use kaleidoscope on these things, with the nostrils and it has horns up there, rattlesnake from Texas probably. And this parts very busy, it looks like a pad, the heat sensitive pad that helps them do vision at nighttime, and if just flip that over, yeah that's actually the way it looks the toads are very fast way to gain weight on a reptile. Horned toad right there. So yeah this is ears and this is the glands, cason glands. [Tries to hand card back] (Remember we're looking to two or three things for each card.) R: *Oh, ok, yeah.* (Pauses 30 seconds) *Strong creature too, it keeps its view on what it's working on, passing on, that's like they have to make sure they have the right kind of bombs and jets and the stand-up is more of a threat and they have to do a complete joint services that way they can keep their conversation going and if they are going with anyone else they can plan their conversations**

which is a good thing but they're trying to raise the country out of what it is and Pennsylvania has chocolate but also a lot of cannons, and Raleigh Virginia and discussion of what's north and south and in California they do a lot of this testing in California. One fang, two fang, three, four, caught caught caught caught, it's the thing that it's caught but can't see anything if it doesn't matches, the rattlesnake will through his mouth broken. So yeah that's what I was watching the news maybe five years ago and I was watching how rattlesnakes get up close and you could be walking out on sidewalk and it could jump where it's not supposed to be. [Hands card back] (Ok, thanks.)" CP: "(ARR) R: Yeah if it didn't have those two things it looks like body. (Rattlesnake?) R: Over examining, examining, and these glands are that, but these glands are at right here, and the multiple color that still has to fit into it, and the color is pickled, and it has fangs, one fang, white fang, one two three four five six. Saw a guy pick a big turtle out of a pond." This response does not really need explanation, other than that it is likely that all assessors would be reticent to ask for a second response after receiving the initial verbalization. We include this response in its entirety simply to illustrate how fluid, digressive, and confusing responses can be when given by someone who clearly has disordered speech processes. It is very unlikely assessors will encounter a response like this in an outpatient setting and it is a rare response even among medicated inpatients, like this person.

Important Considerations when Coding Disorganized and Confusing Communication

Corrected errors.

Sometimes the respondent will recognize and take back or repair communication errors. In general, self-correction lessens the confusion associated with the element and would indicate that a lower DCC score should be assigned to the response. Thus, the assessor will have to make a judgment of whether the respondent recognizes the communication failure and repairs it meaningfully. To the extent that a respondent maintains clarity otherwise throughout the response, while recognizing and correcting an error, the corrected response even could be given a score of 0. The following examples depict responses with corrections that would warrant lower DCC scores than would otherwise be assigned.

*"Crabs in the water, also **horseshoes**, and fish."* This response involves an incorrect, but closely related, word substitution that would indicate that a score of DCC = 1 should be assigned to the response. However, if the respondent immediately said, *"I don't know if horseshoes is right, seahorses – that's it,"* the response would be scored 0.

*"Deer with **antenna** – no, antlers."* The response should be scored 0 because the respondent immediately corrected the error.

*"An arterial or **vernacular** – no, not vernacular. I was thinking of a vein but that's the wrong word."* This odd word use is phonetically and semantically distant from the correct word, venous. If the respondent had not retracted it, the response would have been scored 3; however, because the respondent immediately took it back, the score is reduced to a 1. It would not be coded a 0 because the word used was quite distinct from the word intended.

Contextual considerations in word usage.

More so than with any other code, cultural or subcultural dialects, limited education, or youth can affect scores on Disorganized and Confusing Communication. As such, the assessor should consider relevant background factors both in coding and interpreting protocols. Most often, these factors have to do with pronunciation errors or instances when the respondent substituted an approximate neologism for the actual more sophisticated or Standard English word. Generally, the assessor should consider the socio-cultural and educational background of the respondent when coding. In other words, when assigning

DCC scores, the coder should consider whether the correct word should be in the respondent's lexicon and whether it would be reasonable for the respondent to assume that the assessor would be familiar with the word used.

In English, colloquial uses of suffixes such as “-ish,” and “-y,” to make an approximate comparison (e.g., “greenish,” “lemony,” “the V-ness of his eyebrows”) are not considered errors in communication. Similarly, do not code obvious, colloquial terms that are communicated in a knowingly comical fashion, such as “fancy-shmancy” or “blew the bejesus out of it.” Slang words (e.g., “kinda,” “gonna,” “‘cause” or “cuz,” “it do look like that,” “ain’t,” “y’all,” “yous,” “dem,” “dat”) also are considered intentional word choices and are common in some subcultures, so would not qualify for a non-zero score. Finally, there are several trivial redundancies that are nearly conventional or idiomatic in a given language and do not really suggest cognitive slippage. In English, the most common among these are forms of the following phrases: “two twins,” “big giant,” and “little tiny.” Such trivial redundancies would receive a DCC score of 1.

With languages other than English, apply the rules and idioms of that language. Bilingualism presents another challenge to coding DCC. Coding protocols of bilingual individuals may necessitate an assessor who is a native speaker or a consultation with one. Switching from one language to another is not a communication error in and of itself, though it may qualify if the respondent does not convey their intended meaning. However, one would not generally interpret DCC scores that elevate secondary to bilingualism as indicating disordered thought processes.

Treating a response as if it were real.

This is a type of disorganized communication because it distorts the task, which involves recognizing that the stimuli are merely inkblots. An example would be an excessive emotional reaction to the blots, as if the response object were real or posed a real threat (e.g., “dark monster about to attack me”). The score reflects the extent to which the respondent conceives of the card as real. If the respondent conveys uncertainty about whether the response is real or alive with minimal affective reaction, the response would likely be scored DCC = 2 or 3. On the other hand, if the respondent became visibly upset or turned the card over to reduce fear, the response would likely be scored DCC = 3 or 4. If the respondent has a strong visceral reaction and communicates in a confused, disorganized, or illogically structured manner, the response would like be scored DCC = 4 or 5. It is important to keep in mind that it is common for people processing a trauma to see manifestations of that trauma in the inkblots. The clarity with which they convey the imagery and maintain a coherent narrative about what they see and how they see it will be important for determining where assign the response on the DCC scale.

Illogical Verbal Justification

Overview

Illogical Verbal Justification (IVJ) specifically relates to the logical reasoning the respondent uses to justify a response or identify a response feature. Low scores on this dimension reflect the extent to which reasoning, when expressed, is logical, reasonably complete, stimulus-based, and appropriate or sensible given the nature of the task and the context of what the respondent already established as being part of a response. Higher scores reflect problematic reasoning that is overly concrete or restrictive, excessive certitude, or severely flawed logic.

Most responses do not entail a justification, logical or not. A logical justification makes use of the context, features of the inkblot, and features of the response object(s) and links these elements in a manner that is coherent and sensible to others. A logical justification for an object also identifies attributes that are both necessary and sufficient to characterize the object seen, without illogically excluding potential alternative objects.

At times, a respondent may provide an illogically restrictive justification, which rests on the inference that he or she is ruling out all other possibilities and basing the justification for a response on a single specific object or response feature. For example, identifying an object as coal because it is black (e.g., *"it's black so it must be coal"*). If a blot detail is black, it is not necessarily coal. It could be tar, a crayon, or plastic, among other things. Restricting one's interpretation of the blot detail to coal and ignoring alternative, equally likely percepts is characteristic of problems with formal logic and narrow thinking, and these responses are given IVJ scores at a lower level (i.e., 1 or 2), as opposed to a higher level. Other illogical justifications may involve strained logic, confused thinking, and convoluted reasoning and conceptualization. Responses with more obviously flawed or preposterous logic are given higher IVJ scores (i.e., 4 or 5). Whereas lower scores are likely to be assigned to responses with simple, terse statements with a single illogical component, higher scores are more likely for responses with bizarre content, preposterous logic, and repetitive causal language.

Simply using words indicating certitude, like "has to be" or "must be," does not automatically indicate that reasoning is illogically restrictive. For example, in the response, *"These are mountains or hills; this section between the hills looks dark and deep, so it must be a valley,"* the logic is clear and easy to follow. The respondent's conclusion that *"it must be a valley"* is reasonable given that (1) the mountains or hills are established elements of the response, (2) hills and valleys relate logically in that they are both complementary land formations, and (3) a darker area would imply depth in the context of topography. If the respondent had said, *"This section between the hills looks bright and shiny, so it must be a valley,"* without further explanation, this would be illogical, because neither bright nor shiny provide a logically linked rationale for the valley.

As another example, we draw on the first response presented in Appendix A to Card V: *"Butterfly, a black butterfly. Actually, it's not a butterfly, it's a bat, because it's black, and bats are traditionally black."* Here the respondent is incorporating the blackness of the card into the percept but struggling some to make it fit. Initially, it is a black butterfly, which is not conventional. Consequently, the respondent modifies the percept to account more fully for an object that commonly is black, asserting that it is a bat rather than a butterfly because of the blackness. There is no part of this mental sequence that is illogical; rather the blackness that has been established as part of the response logically leads to a preference to see the winged object as a bat, which is prototypically black, rather than a butterfly, which is prototypically colorful.

The respondent is not asserting an overly restrictive logic that would lead to an IVJ score greater than zero, such as by saying, *"It's something black, therefore it must be a bat,"* as if anything black has to be a bat. Rather, the respondent is using the color to shift the classification of the object from something that is not typically black to something that is typically black. Other winged objects could be black, of course, such as a crow, a raven, or even a winged beetle. However, the inkblot stimuli implicitly shape and constrain perception, making those response options less common on this card than a butterfly or bat. As important, in the full response, the respondent goes on to clarify that this bat has wings, legs, a head, and protruding ears. These necessary and sufficient features effectively rule out the other alternatives,

making this a reasonably complete justification for the object seen that is based on logical extrapolations from the inkblot features.

The criterion of a reasonably complete justification is relevant only when the respondent invokes causal language, asserting that a thing is what it is because particular conditions apply. Most Rorschach responses do not invoke causal language, and objects just appear to be present with certain attributes. That is a natural function of the task requirements to say what the inkblot might be, and it is not problematic. Thus, if the response in the previous paragraph was simply, *“it’s a black butterfly”* or *“it looks like a bat, here’s the wings and here’s the head,”* there is no problematic logic at all. Further, the respondent does not have to enumerate all the features that define a butterfly or a bat, nor do they need to identify all the key features that distinguish between them and other kinds of objects. Thus, assessors only consider scores on this dimension when the respondent expresses reasoning in the response.

Also considered when scoring is whether the respondent spontaneously provides problematic reasoning or only does so following a clarification question. In the CP, when the assessor asks the respondent to explain what about the inkblot makes it look the way it does, it challenges respondents to offer a justification for their percept, and a rationale may or may not be readily available to them. In general, if illogical or strained reasoning emerges only in response to a clarification question, the assessor assigns it a score one level below the score she would have assigned if the respondent delivered the reasoning spontaneously. The initial portion of the CP after the assessor repeats the response back provides the respondent with considerable latitude to respond. If the respondent provides problematic reasoning at this point, it is not in response to a specific assessor question. Thus, if the respondent at this point spontaneously provides a rationale that links directly to an oddity present in the RP, the assessor would consider it evidence of spontaneous reasoning and code it accordingly.

Coding Criteria

IVJ = 0.

A score of 0 indicates that a response contains a logical, reasonably complete, stimulus-based justification for the response object or its features that uses no strained reasoning, excessive or illogical certitude, or problematic logic. Reasoning or justification of the percept, if offered, involves necessary and sufficient logical links between attributes of the inkblot or elements that the respondent established as being in the response and the logically justified response object or feature. Further, the reasoning does not illogically exclude alternative objects or interpretations.

For instance, on Card VII, a respondent may say, *“This looks like a woman, because this is her hair up in a fancy ponytail.”* A ponytail reasonably establishes a human figure in the response, even though people could put ponytails on their pet animals. In addition, a fancy ponytail reasonably establishes a woman as opposed to a man. A man also could have his hair up in a fancy ponytail. However, one would less commonly encounter a man with a fancy ponytail in most cultures, and it would be logical to conclude when seeing a person with hair up in a fancy ponytail that it is a woman rather than a man. Thus, the ponytail feature is both necessary and sufficient to justify the inference of the object being a woman. In addition, the respondent does not indicate excessive certitude, for instance by asserting that it *must be* a woman *because* the hair is up in a fancy ponytail. Rather, the respondent makes a reasonable inference using support from other response object features. Had the respondent instead said, *“This looks like a woman because this is her hair”* or *“because here are her legs,”* and offered no further rationale for that gender attribution, the response would be illogically restrictive based on the

identification of necessary but not sufficient attributes and would receive a score of 1. Subtly different responses would receive scores of 0. For instance, a zero would be assigned if the respondent said, *"This looks like a woman, here is her hair and here are her legs."* The respondent identified necessary features that are not sufficient to establish a woman. However, the respondent did not use those features as a justification for the object being a woman.

IVJ = 0 examples. The following are examples of responses that would be scored IVJ = 0, along with brief indications as to why it would receive this score.

Card X; RP: *"I don't get this one. Something with their heads together. I guess their humans. Here's their body (D9), hands (D6), and there's no clear bottom where the feet would be."* The respondent infers that they are humans but is tentative and infers this logically from necessary elements that would be associated with humans, including a head, body, and hands, and that collectively are sufficient to establish humans.

Card III; RP: *"Two people. African women, holding a pot or something here."* CP: *"(ARR) R: Yeah, here and here. They have breasts and are black, so African women. Looks like they are cooking something."* The respondent draws firm but not excessively certain conclusions using features present in the inkblot to justify the nature or characteristics of the objects seen. Identifying secondary sex characteristics is both necessary and sufficient to establish gender to a reasonable certainty, as is using skin color to identify ethnic background.

Card III; RP: *"Two people."* CP: *"(ARR) R: One here and the other here. They have breasts (points) and penises (points) too. That's odd. I guess they must be hermaphrodites."* The respondent draws a tentative conclusion about their sexual dimorphism, but again does so logically using features present in the inkblot to justify an inferred classification that would account for the contradictory nature of the elements seen. Thus, the contradiction between the secondary (breasts) and primary (penises) sex characteristics is necessary and sufficient to warrant the classification (hermaphrodites).

IVJ = 1.

A score of 1 is assigned to a response in one of three circumstances. First, a response may contain a single instance of spontaneously offered mildly strained reasoning. In some cases, this may be a spontaneously offered justification that uses restrictive language along with language that is more tentative or uncertain (e.g., *"could be a..." "I'm not sure..." "I guess it's..." "it sort of looks like a... because," "I think..."*). Alternatively, the respondent tempers the illogicality of the response by conveying humor or playfulness. Second, the respondent may provide incomplete reasoning, identifying necessary attributes in the stimulus but ones that are not sufficient to justify the conclusion. For example, a respondent might say, *"It's a bird because it has two wings."* Although this is a reasonable justification, as intact birds do have two wings, it is also restrictive, in that there are many other animal species that have two wings (e.g., bats, butterflies, moths), in addition to mechanical objects such as many planes. Had the respondent said, *"It's a bird because it has two wings, two legs, a head, and a beak,"* the added features would provide a sufficiently detailed foundation on which to base the conclusion. Indeed, just wings and a beak would be sufficient to differentiate a bird from any other winged object. Finally, responses scored 1 may contain overly simplistic and concrete reasoning that is provoked by a clarification question, as opposed to being offered spontaneously.

IVJ = 1 examples. The following are examples of responses that would be scored IVJ = 1, along with brief indications as to why it would receive this score.

RP: *"This green looks like it must be algae or something."* CP: *"(ARR) R: Yeah, here in this area. (What makes it look like algae?) R: It has to be (or "must be" or "It is") algae because it's green."* The RP has language that is both overly restrictive (*"it must be"*) and tentative (*"or something"*), qualifying it for a score of 1. In addition, in this case, overly concrete or restrictive reasoning also is offered in response to the assessor's clarification question. Because of this, the response also qualifies for a score of 1. Had the unequivocally restrictive language used in the CP been given as a justification spontaneously in the Response Phase, the response would have been scored 2.

RP: *"A rabbit next to some lettuce."* CP: *"(ARR) Here's the rabbit, his head, and ears. (You said it was next to some lettuce?)" R: It's lettuce because it's green and it's next to the rabbit."* Here, the illogically restrictive components (green and next to the rabbit) occur non-spontaneously as a reply to a clarification question.

RP: *"A garden with the Eiffel Tower. Up here in the plants, **it might** be two people."* CP: *"(ARR) R: Yeah, **it must** be people. They are walking in the garden..."* The respondent clearly establishes a tentative context for the people in the RP, and the illogically restrictive language (*"must be"*) in the CP does not override the RP tentativeness about the same logical link.

RP: *"Two frogs, and **I guess** they are climbing up a tree."* CP: *"(ARR) R: Hind legs, body, and this is the tree. They **must be climbing** because they are on its sides."* The respondent directly links the tentative language in the RP (*"I guess"*) to the tree climbing, and only later in the CP is that described in an illogically restrictive manner. Had the respondent said in the CP, *"could be"* or *"might be"* or even *"look like they are"* instead of *"must be"* a score of 0 would be indicated.

RP: *"I see two otters."* CP: *"(ARR) R: Yeah, right here on the outside. Looks like otters because they have a tail and legs (points)." Otters have tails and legs, and river otters have a distinctively long tail. However, without further communication or pointing to what is an obviously long tail on the inkblot, this response would receive a score of 1 because so many other types of animals also have a tail and legs.*

IVJ = 2.

A score of 2 is given to a response containing a single instance of overly simplistic, restrictive, or concrete reasoning. This involves the respondent illogically justifying his or her response based on concrete characteristics of the inkblot, including reasoning based on size, color, form, position, or number of objects. In such cases, to qualify for a score of 2, the reasoning must be offered spontaneously and expressed unequivocally. Alternatively, strained reasoning provoked by a clarification question could warrant a score of 2 if the logic is highly concrete or delivered with more serious excessive certitude.

IVJ = 2 examples. The following are examples of responses that would be scored IVJ = 2 due to their use of overly concrete reasoning used to justify the response.

"It looks like two people. It must be a man and woman because they are two." Number reasoning. The reasoning offered is highly concrete; there can be two of many kinds of objects, and men and women do not prototypically come in pairs.

"It's on the top, so it must be a crown." Position reasoning.

"It's green so it's gotta be a maple leaf." Color reasoning.

"This part is round so he's a saint because of the halo." Form reasoning.

RP: *"It's two frogs climbing up a tree."* CP: *"(ARR) R: Hind legs, body, and this is the tree. These look like branches, and this is the top of it here. They **must be** climbing because they are on its sides."* The respondent spontaneously commits to the two frogs climbing in the RP, unlike the frog example

at Level 1. In the CP, the respondent provides illogically restrictive reasoning based on the position of objects spontaneously and with conviction.

IVJ = 3.

Assign responses a score of 3 in one of two circumstances. First, a score of 3 reflects excessive certitude or highly concrete reasoning when it is delivered spontaneously and without tentative language (e.g., *"He's a sexual predator because he's next to the blue bra"*). Second, a score of 3 is assigned to a response containing an instance of confused and convoluted logic when it is delivered in response to a clarification question. The latter would reflect seriously flawed or preposterous logic.

IVJ = 3 examples. The following are examples of responses that would be scored IVJ = 3.

Card X; RP: *"A garden with the Eiffel Tower. Up here in the plants, two people."* CP: "(ARR) R: *The tower is this part up here, the plants out here, and it **must be** two people; they are walking in a garden.*" The respondent expresses excessive certitude and illogically restricted reasoning with spontaneity and conviction at the outset of the CP and did not use tentative language in the RP.

Card VII; RP: *"Indians are right up against a magnet."* [spoke softly; sets card on table] CP: "(ARR) *Here's the magnet* [points to D6]. (What makes it look like a magnet?) R: ***Because they're stuck together.*** (How do you mean?) R: ***It's a magnet!*** [said like it is obvious] *It pulled 'em both together* [points to the Indians]." Although not stated explicitly in the RP, the implied causal reasoning present in the RP is that it must be a magnet because it pulled them together, which is an overly restricted inference from two Indians seen together. The convoluted logic is evident in response to the CP questions.

Card III; RP: *"Two African men beating on drums that's all I see. They are both naked, they're women instead of men and they are beating on drums."* CP: "(ARR) R: *Here and here.* (What makes them look African?) R: *African. Drums. Naked. **Ain't nobody going to hit them because of the color red here. The red means nobody will hit them. Here in the U.S. we are protected because of God. We are all coming together as one whether its Michigan and California, and now Barrack Obama is president, we finally have a black president for protection.***" Confused and convoluted logic is offered as a justification for why they look African in response to the clarification question.

IVJ = 4.

Unlike with lower scores, to receive a score of 4 or 5, the flawed logic must be offered spontaneously, meaning that it is not prompted by the assessor via a clarification question. A score of 4 is given to a response that contains grossly illogical or confused reasoning that is delivered unequivocally and without tentative language. Such responses may involve nonsensical merging of mutually exclusive concrete and abstract elements. Alternatively, the respondent's justification for his or her percept is incompatible with the evidence on which it is based, whether the source of evidence is a concrete feature of the inkblot or unexpressed but highly personalized information.

IVJ = 4 examples. The following are examples of responses that would be scored IVJ = 4.

Card VIII, RP: *"This looks like a lobster up here (D4) consuming these red lions (D1)."* CP: *"This is a lobster. It has all kinds of arms and eyes here. **It's obviously consuming the lions because they are red.**"* Grossly illogical reasoning expressed with excessive certitude. Had the respondent provided additional context supporting a logical link between redness and being consumed (e.g., *"the red makes them look like they are bleeding"*), a lower score is indicated.

*"It's coming apart at the seam because it's schizophrenic. Right down the middle, it doesn't know which name to take, butterfly or Schmetterling."*¹ Highly personalized illogical reasoning ("because it's schizophrenic") is spontaneously used to justify the percept.

"It has to be kidneys because it is next to the horse." This is an instance of highly illogical positional reasoning; being next to a horse does not remotely imply kidneys.

"Black, so that butterfly must be lonely." This is an instance when the respondent provides a seriously illogical link between concrete blot features (color) and an abstract generalization (loneliness) that is preposterous given the object involved.

"The colors are all messy so that person has to be confused." As in the above example, the respondent links a concrete feature of the blot (messy colors) to an abstract property (confusion) in a nonsensical manner.

Card III; RP: *"Maybe a vampire, I'm guessing."* CP: *"(ARR) R: Yeah, See the vampire? It's got the... right in the middle dancing with the black around the eyes (space inside D1). And the red (D3). Actually, I was trying to say a crow. Because I got bit by a snake before, made me say vampire."* Although there is tentativeness in the RP and the key communication comes late in the initial CP verbalization, the respondent spontaneously provides the convoluted rationale for saying why he said it was a vampire at the outset in the RP.

IVJ = 5.

A score of 5 is assigned to a response containing multiple instances of the type of severely flawed logic characteristic of an IVJ = 4. As is the case with a score of 4, the flawed logic must be spontaneously asserted and delivered without hesitation or qualification. These responses are experienced by the assessor as entirely illogical, with the respondent's reasoning involving highly contradictory justifications and conclusions that make little to no sense relative to the evidence on which they are based.

IVJ = 5 examples. The following are examples of responses that would be scored IVJ = 5.

"Little girl rabbits, because they have some dresses, and they are angels because of the soft tone that makes them sweet." This response contains two instances of highly flawed unreasonable inferences.

"This is a log because this is an insect. Not knowing how ugly they do get, it's an insect because he knows he's pretty good looking. Looks nice." This response contains multiple instances of confused logic.

"With the picture up this way it's two triggers, so another gun. My eyes smell that color there and it smells like another gun." In addition to the faulty logic concluding it is a gun because of two triggers, the conclusion is based on nonsensical reasoning involving the merging of mutually exclusive elements (eyes that smell a color).

Card III; RP: *"Monkeys, spider monkeys ready to mate. They see the happiness and put a bow on it. The bow is the consensual part... ... [~30 second pause] Colliding repel."* [A initially thought the latter was a second response.] CP: *"(ARR) R: Yes, look at the erections (tracing Dd26). They both have erection so they're probably booty brothers of homies (D9). And then up here (points to D2), the upside down babies means they doing homo things. And that is the way it is in the mongo world. M-O-N-G-O [spelled it out]. Ever heard of those? They are monkey people. They really do exist in the African world. My uncle went there. Studied the African people. You can't go there from the travel industry. They eat you up like cannibals. ... I wish they would fix my teeth so I*

¹ Schmetterling is German for butterfly.

*don't look so weird. I would like those dentures. Then again, I've got to look out for these monkey women. They sit on my face and I got nothing to bite them with. If I had dentures, at least now I can fight back, bite back. **That's why Catholics say oral sex is a sin because these mongos will suffocate you to death.** But here they're not the same sex. Usually when you the same sex you collide and repel. Same sex hug and kiss. Opposite hug and kiss. It's a form of consensual. Understand what I'm saying? **The bow** [points to D3] **means it was all done in consensual.** But **this picture is homosexual because of the babies. They upside down so they dead homosexual babies. In real life that is true.** (Okay, so the collide repel was part of this response?) R: *Of course. They were holding hands* [points to D7] **so it could only be one thing.**" This response is laden with repetitive causal language that is based on peculiar, internally driven logic.*

Card X; RP: *"Oh no, that wouldn't even be right* [leans back hard in chair, clearly having a strong reaction to the card]. *Gore-ish. This is a female prostitute right here. Then these are her ovaries over here when someone decided to make a human omelet out of her. Some doctor tied her tubes and these are the last two eggs. I didn't mean to see that, it just popped into my head.*" CP: *"(ARR) R: This part here looked like a bra (D6), so I came to the conclusion it was a woman. **Then this must be her last two eggs (D2).** I read an article that in other countries **the prostitutes have their ovaries removed in order to not get pregnant. What brought it is that this looked like a bikini or a bra. Then these two eggs just popped into place. I just saw the bra and the eggs, what brought the rest was the article I read before.**"* The response again has multiple instances of causal reasoning based on peculiar and faulty justifications for why it is a prostitute and her ovaries.

Incongruous Perceptual Combinations

Overview

Incongruous Perceptual Combinations (IPCs) relate to the perceptually based elements of a response that the respondent combines incongruously, illogically, implausibly, or impossibly. They involve incongruous combinations of attributes on or in a single object or illogical relationships between two or more response objects. At the extreme, these two types can merge, such that the respondent perceives two mutually exclusive objects as simultaneously residing in the same space. Scores on this dimension reflect the extent to which response objects and their features are logically structured and related – both spatially and conceptually – in reasonable ways. A score of 0 indicates that a response contains no objects with illogical or impossible perceptual combinations. Thus, there are no objects with incongruous attributes, subcomponent features, qualities, or actions, and no objects in an illogical relationship.

Incongruous Perceptual Combinations express a form of problematic conceptualization. In this respect, they are like Illogical Verbal Justifications. Both are manifestations of illogical conceptualizations and communications. However, they differ in that IVJs involve verbal expression of the problematic conceptualization as a justification for a response object or response element. That is, the respondent directly expresses problematic logic in his or her communication. For IPC, the respondent typically provides no justification for the percept and its problematic attributes or relationships. Rather, the respondent simply perceives the incongruous components to be that way. These differences have salient consequences for coding. In general, a key way to distinguish IPC from IVJ is to recognize how the assessor *hears* IVJs but *sees* IPCs.

As stated previously, incongruous perceptions may involve combinations of attributes or actions associated with a single object or relationships between two or more objects. In a single object response, one subcomponent or feature of an object (e.g., its movement, coloration, body part) is implausible or illogical given the nature of the object (e.g., animal, person, household object) or given other subcomponents of the object. Less severe examples of this include a “red lion” or a “lion that is flying,” where the object is the “lion,” and the implausible attribute is “red” or “flying” (see Figure 1 for a schematic). More bizarre or illogical combinations include “a guy with two heads for feet” or “a winged penis,” both of which would be assigned higher IPC scores. In responses containing two or more objects, the respondent may integrate objects with one another in an illogical, implausible, or impossible way. Examples include “a butterfly picking up a bear” or “two lions shaking hands” (see Figure 2 for a schematic).

Figure 1. Schematic of a Single-Object IPC Response

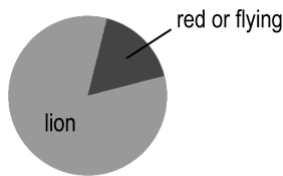


Figure 2. Schematic of a Multi-Object IPC Response



The highest IPC scores (Level 5) are assigned to two main types of responses. The first is when a response has two or more instances of notably or markedly illogical visual attributes or relations that are characterized by primitively bizarre or primitively contradictory elements. Second, Level 5 severity may also emerge when there is a blatantly impossible visual structure, such that the respondent visually superimposes response objects on one another, so they simultaneously occupy the same inkblot region in a visually fused but markedly impossible way. These responses thus encompass a visual condensation or fusion of two simultaneously and incompatibly perceived entities in the same location. Thus, it is two different things simultaneously seen as one, not one thing with atypical attributes. We illustrate this more fully in the section on Level 5 scores.

Considerations when Coding Incongruous Perceptual Combinations

Permissive contexts.

The respondent can make what are otherwise incongruous combinations reasonable by interjecting a permissive or imaginary context. Examples of common permissive contexts include dreams, cartoons, aliens and other planets, imaginary and make-believe creatures, abstract art, etc. When a permissive context accounts for what otherwise would be a strange attribute or relationship, a response may be scored IPC = 0 or lower on the scale than it otherwise would have been coded. For instance, bears do not naturally dance, but people train circus bears to behave as if doing so. As such, seeing “dancing bears” on Card II leads to an IPC score of 1, but seeing “circus bears dancing” adds the permissive context and leads to an IPC score of 0. The context established by the respondent or the nature of the

object seen sets parameters for what are permissible or appropriate actions or attributes. Establishing a type of permissive context does not mean that everything and anything becomes permissible.

For instance, a cartoon human can fly, and a cartoon animal can talk, but it would be an incongruous action for a Pegasus or centaur to shoot lasers from their eyes, for a centaur to fly, or for Pegasus to talk. Similarly, identifying something as a monster or creature permits a range of attributes, including a tail, scales, atypically large or small appendages, and generally an atypical number of attributes (e.g., one or three eyes, no nose). However, on its own identifying a monster or creature does not provide sufficient context for it to have a truck for an appendage, to be wearing jewelry, or to be baking a cake. Similarly, “A three-headed demon” would receive a score of 0, but “A three-headed demon smoking a cigarette” would qualify for a score of 3. In fact, some bizarre and uncensored content may be inappropriate in nearly any context (e.g., “Mickey Mouse, naked, eating Goofy”). Thus, it is certainly possible to have parenthesized fictional content [(H), (Hd), (A), or (Ad)] receive a high IPC score.

When key object parts or a plausible relational context are missing.

Typically, an IPC score of 1 is assigned for an organism or other object that is missing a crucial part or subcomponent. For example, “a person without a head,” “a motorcycle; it just has a front wheel,” or “a bird without a beak” would be assigned scores of IPC = 1, in the absence of any other features that would dictate a more elevated score. Although it is possible to observe a dead person without a head, a motorcycle without a back wheel, or an injured bird without a beak, the percept is incongruous in the absence of a rationale for the missing element. Thus, the onus is on the respondent to provide a context for the missing element to make it plausible.

The absence of essential features also may contribute to an IPC code greater than 1 if it is clear that an essential element is missing from an otherwise intact object that would need it. If the response had been “a person without a head, **standing**” or “a headless person leaning back” each would warrant an IPC score of 2, because the “a person without a head” is inconsistent with “standing” or “leaning back.” Similarly, “a woman riding a motorcycle, but it has no back wheel,” or “a bird without a beak **eating**” would receive an elevated score on IPC, because it is not possible to ride a motorcycle lacking a back wheel, and a bird without a beak cannot eat. Following the same rationale, “two boneless chickens looking at each other,” “it’s one of those skinless types of bears,” or “it’s the heart and lungs; the insides of a person who didn’t have any bones” all contain inherently incongruous and impossible elements and warrant an IPC code greater than 1. However, “two deboned chickens,” “a skinned bear,” or “it’s the heart and lungs of a person; you can’t see the bones” do not possess the incongruous element and thus would receive a score of zero.

Similar principles apply to possible but unlikely relationships that are missing a plausible context. IPC scores of 0 are reserved for responses that are fully plausible in their visual structure, and the assessor, while sensitive to the demands of the task, does not perform the work of contextualizing an unusual response for the respondent. Rather, that obligation resides with the respondent. Thus, “a crab eating on a steak” needs plausible context provided by the respondent (e.g., “maybe dropped there by someone”). The same would be true for “two seahorses with yellow flowers in between them” (e.g., “maybe its ornamentation in a fish tank”) or “a butterfly on top of a bear” (e.g., “like caught in a moment before either noticed”). Similarly, “two bears standing back-to-back with their arms out” or “two people talking with chickens hanging down behind them” would need a context supplied to justify a code of zero (e.g., “like they both got started by something in different directions” and “something you might see at a butcher shop,” respectively).

Anatomical structures and terms.

When considering incongruous attributes, one challenge concerns anatomical structures that different species share but express or use in different ways. As a general guideline, when language refers to the same anatomical structures (e.g., phalanges) using different names (e.g., fingers, paws, hooves, flipper tips, wing tips), *an IPC code is indicated when the human term is used for its counterpart on an animal where that element is given a different name.* Thus, if a respondent identifies fingers or hands on a dog instead of toes and paws, an IPC score of 2 is assigned. Other examples include the combination of the humerus, ulna, radius, and phalanges that define a full arm in humans but a wing in bats or birds, legs in dogs or lizards, and flippers in whales or seals. Identifying an arm on a bird thus triggers an IPC code above zero. This general guideline holds unless the respondent references the cross-species similarity in the underlying anatomical structure. It also applies to human appendages that are typically not visible on an animal, even though the animal may have an analog to that body part. Thus, in general, an elbow on a bird, wrist on a bat, ear on a whale, penis on a dolphin, finger on a cat, and arm on a cow would qualify for an IPC code other than zero.

In English, it is appropriate to use the word *arm* to designate appendages on a cephalopod (e.g., octopus, squid), the upper limbs of a primate (e.g., monkey, gorilla), or any other animal that uses its forelimbs for grasping and manipulation rather than just walking (e.g., bear, kangaroo, squirrel, raccoon). Using this definition, one could reasonably refer to a cat's forelegs as arms, but not to a dog's forelegs. However, arms are inappropriate attributes on many animals, including insects, birds, and ungulates; in these cases, the presence of arms generally would result in an IPC score of 1 or 2.

Terminology for appendages across animal species can be a little more challenging to decipher than the use of human terms for animal body parts. Birds, elephants, horses, dogs, and people all have *feet*. However, only certain kinds of mammals have *paws*; only birds, bats, and insects have *wings*; only people and most other primates have *hands*; only fish and some other aquatic animals (e.g., porpoises and some whales) have cartilage-based *fins*; and only land animals that have fully or partially re-entered the water (e.g., whales, sea turtles, walruses, penguins) have bone-based *flippers*. However, there are some exceptions to these kinds of terms, and the distinction between *fins* and *flippers* presupposes some technical knowledge of animal morphology (see section below on "Identifying correct features with technically incorrect elements"). For instance, it is legitimate to use the term *hand* to describe the dexterous front feet of some mammals, such as koalas, kangaroos, opossums, raccoons, beavers, and squirrels. Frogs and toads also have hands, as well as appendages called fingers on their front feet. In addition, the *flippers* of cetaceans also are their pectoral fins, making *fin* an appropriate term. For dolphins, porpoises, and the whales with dorsal fins, only the dorsal fin is a true fin (i.e., made from cartilage), even though the dorsal fin and the flippers (i.e., pectoral fins) for these animals, as well as the flippers of sea turtles and pinnipeds (e.g., seals), serve the function of fins. As such, calling those appendages *fins* would not result in an IPC code other than zero. For flying squirrels, it also is appropriate to use the term *wings* to describe the outstretched skin that lies between their extended legs.

In English, the term *feelers* is essentially synonymous with *antennae*; thus, it is appropriate to use either word with any arthropods (e.g., insects, spiders, crustaceans). Neither feelers nor antennae are appropriate features for vertebrates (e.g., birds, most fish², reptiles, mammals), so the identification of either on a vertebrate would result in an IPC score of 1 or 2. The term *pincers* refers to a claw-like

² The exception is for fish with barbels, like catfish. It is common to call these whisker-like appendages feelers.

grasping structure that is found on crustaceans (e.g., crab, lobster, shrimp), insects, and other arthropods, while *teeth* are found on vertebrates of all types (e.g., mammals, reptiles, fish) but not on invertebrates. As such, pincers identified on mammals, reptiles, or fish, as well as teeth seen on spiders, crabs, or insects generally would obtain IPC scores of 1 or 2.

It can be challenging to make coding decisions about *tails*. Tails are anatomical features found on fish, birds, reptiles, almost all mammals, and most amphibians. The mammal exceptions are the great apes or hominids (humans, gorillas, orangutans, chimpanzees, and bonobos), and the amphibian exceptions are mature frogs and toads. Identifying tails on any of the latter would lead to an IPC score of 2. Most invertebrates do not have tails, including spiders, mollusks (e.g., clams, oysters, octopuses), and most insects. IPC scores of 1 or 2 are generally indicated when tails are identified on these animals, including bees, beetles, ants, grasshoppers, flies, mosquitos, and cockroaches. However, many crustaceans have tail-like appendages that serve locomotion; including lobsters, shrimp, and crayfish (though crabs do not have tails). Snails and slugs, as well as squids and scorpions, have tail-like appendages. Thus, code IPC = 0 when tails are seen on these animals.

Butterflies and moths are the animals most often seen in Rorschach responses where tails become a coding uncertainty. Unlike almost all bats, technically they do not have tails. However, some species have prominent tail-like appendages, including the aptly named swallowtail butterflies and swallowtail moths, as well as the Luna moths. These insects do not have a single tail extending from the body, but rather elongated wing extensions on each hindwing that are called tails. The two cards where respondents commonly identify butterflies and moths are Cards I and V. The relevant tail-like stimulus features differ on each card. Card I pulls for the identification of a single tail at Dd31, whereas Card V pulls for the identification of a dual tail at D9. As such, code IPC = 1 when a single tail is attributed to a butterfly or moth on Card I, but code IPC = 0 when a dual tail is attributed to a butterfly or moth on Card V. For the latter, the person does not have to say, “tails” or “tail on each side,” or something similar. Just saying “tail” and pointing to the D9 area is sufficient.

Another rare but potential complication concerns certain types of insects, such as silverfish, bristletails, mayflies, and crickets. Although respondents almost never identify them on the Rorschach cards, they have bristles or “tails” extending from their abdomen and could be consistent with either Card I (bristletails) or Card V (mayflies, crickets, and perhaps silverfish). As should be the norm for instances when a respondent identifies any highly specific object in the inkblots, assessors should obtain images from the internet or other sources to judge the extent to which the object identified has incongruous elements.

A final complicating factor, at least in English, is that *tail* has other connotations, including the tail end, bottom, or hindmost part of an animal. Thus, for almost any animal, if the respondent identifies a *head* as well as the *tail end*, *tail part*, or *tail area* of an animal, code IPC = 0. Unlike identifying a *tail*, which implies the appendage, the *tail area* or *tail end* embodies the broader connotation. The only exception to this general rule would be an odd situation where a respondent identified a tail end on an animal when doing so produces a visually incoherent image, such as on a starfish, octopus, or person.

At times, it is not clear whether to *assign a DCC code or an IPC code* to a response because it is unclear whether the respondent used an incorrect word to describe a realistically seen attribute or used the correct word to describe an unrealistic or implausible visual attribute. For instance, with the response, “A butterfly, here’s the wings and here’s the antlers,” it is unclear whether the respondent is seeing actual antlers on the butterfly or if the word ‘antlers’ was incorrectly substituted for the term

'antennae.' If the preponderance of evidence suggests actual antlers are being visualized (e.g., "A butterfly, here's the wings and he's got boney antlers"), the proper code is IPC to capture this visually based implausible attribute. On the other hand, if the preponderance of evidence suggests a verbal slip or paraphraxis (e.g., "A butterfly, here's the wings and here's the antlers... or whatever you call those things"), the proper code is DCC to capture the linguistically based lapse in cognitive functioning. The **general principle** is to code DCC when the respondent uses the wrong word to describe the correct visual image (said antler but really sees antennae) but code IPC when the respondent sees an inappropriate attribute on the object (sees antlers on the butterfly). If the verbalization does not lean in one direction or the other, as often is the case, and does not contain any suggestion of word finding difficulties, the historical convention is to code IPC.

Identifying correct features with technically incorrect elements.

All insects, including butterflies and moths, have six legs and four wings. All spiders have eight legs, and all crabs have 10, two of which are claws. However, assessors do not expect respondents to be experts in various branches of zoology or botany, such as entomology or mammalogy. Rather, the expectation is that respondents have conventional knowledge of plants, animals, and other objects in the natural world. As such, we expect that respondents know bears are not pink, humans and other animals do not have three legs, bats do not have antlers, spiders are not blue, flowers do not smile, volcanos do not feel angry, roots do not grow from the top of a tree, and butterflies do not have a single tail attached to their body. When respondents identify those kinds of attributes on an object, it is an incongruous attribute that receives an IPC score higher than 0.

The issues are different, however, when respondents correctly identify features that exist on an object but that are incorrect in the technical details that a specialist would know. Thus, most people know that butterflies and moths have wings on each side of their body, though many do not know that there are two on each side, given that the wings move up and down in unison and often are visually indistinct. In addition, people know that spiders and crabs seen from above have a roundish shape and many legs. However, most people would have trouble indicating that spiders have 8 legs and crabs 10, or that for crabs two of those legs are claws. Similarly, most people know that flowers come from plants with leaves, but most people do not know that the green leaf-like part adjacent to many typical flowers is a sepal, not a leaf. Thus, when people see winged insects, including the butterflies and moths that are common on Cards I and V, they receive an IPC score of 0 if they identify the side features as "two wings" or "wings, one on each side," even though this is technically incorrect. Similarly, if people identify the D1 area on Card X as a spider, crab, or octopus and note "all its legs" or "lots of legs" they receive an IPC score of 0, even though the D1 object has more leg-like appendages than any of these animals. If Card IX is identified as a flower, with the orange D3 area as the petals, the green D11 area as the leaves, and the red D6 area as the pot or some other part, the response is coded IPC = 0, even though the correct technical term was not used for the sepals. The same would be true for a flower located at the D15 area of Card X or any similarly permissive location where respondents may see leaves adjacent to petals. These examples are illustrative but not exhaustive.

Considering the guidelines for butterflies and moths on Card I, it may seem somewhat arbitrary to code IPC = 0 when respondents identify a butterfly as having two wings rather than four, but to code IPC = 1 when respondents identify a butterfly with a tail. However, the key distinction is that butterflies and moths have wings; they do not have a tail. We code IPC when respondents identify the presence of an incongruous attribute – an attribute that does not belong. We do not code IPC when respondents identify the presence of a correct attribute that is technically incorrect in some of its detail.

Species- or object-appropriate attributes.

As a rule, if the respondent describes an object with species atypical attributes, it is incumbent on the respondent to provide the permissive context for that attribute. One can find atypical examples of many living things if searching the internet hard enough. For instance, one can find a very rare orange lobster, a very rare New Guinea singing dog, a cobalt blue tarantula from Myanmar, a pink Eiffel Tower, a dog that “climbs” a tree or “rides” a skateboard, and a building with “wings.” One can also find a “waving” or “High-Fiving” bear, a “dancing” duck, a person with pink eyes, a squirrel “praying,” a cat “driving” a car or “typing” at a computer, and of course a blue-legged Chesapeake blue crab. These real or staged exceptions to the general qualities of an object do not provide a permissive context on their own for a respondent to identify something similar in the inkblots. Just because there are blue-legged tarantulas that live underground in Myanmar does not mean this is common knowledge or that a particular respondent has any awareness of that incongruously colored spider when identifying one on Card X. Thus, the respondent needs to provide a context for atypical attributes. It is not incumbent on the assessor to search the internet to discern whether anything similar exists in some remote part of the world, much less in the Photoshop fantasy of some individual, or in the viral video that happened to catch some odd or staged behavior that is watched by many people exactly because of the incongruity recorded.

This or That responses.

At times, respondents are unsure about whether they are seeing the response one way, or an alternative way and they do not resolve the alternative possibilities with a clear solution. These are “This or That” responses. The general guideline is for assessors to code all the elements present in the response. Thus, code IPC > 0 for the following responses to Card V, *“I can’t tell if it is a person in a costume or a squirrel with wings,”* and Card IX, *“Two rabbits (D2), either a rabbit looking in the mirror or two rabbits looking at each other.”* The Card V response is coded for the squirrel with wings and the Card IX response is coded for a rabbit looking in the mirror.

When considering these types of responses, it also is important to keep in mind that each response option is coded as its own percept and that the percepts are not considered in a crosswise manner. In other words, code IPC when either the “this” or the “that” justifies it, but not when something in the “this” response would be an incongruous perceptual combination if it had been seen as part of the “that” response. This principle is illustrated below with a confusing example of a complex response that the assessor initially thought was two separate responses.

On Card III, the RP was, *“Looks like two skinned chickens (D9), like pulled the feathers off of it (laughs, gestures in ripping motion). And then again, they look like people (D9), looks like they got shoes on (points to Dd33), got a chest, both of ‘em got a chest, a head, a neck, body.”* The CP was, *“(ARR for skinned chickens.) Right. It looks like they’re getting ready to, uh (pauses), I don’t know what they’re getting ready to do. Looks like they’re getting a chest on them, both females with high heels on. And they’ve got luggage that they’re carrying around in their hand (D7), that’s their arms and hands (Dd30) and that’s the luggage that they’re carrying around with them, that looks like their breasts (Dd27). Looking like going to sit down on something, but nothing to sit down [on]. (Skinned?) Cuz they’re, uh, chickens when they skin them they look just like these pictures, like chickens with no feathers on them. And they look like girls with breasts and high heels, legs, bodies, a waist. And they just trying to find something to do right now. (ARR for the two people.) So that was the chickens or people picking up luggage and bags with their hands. They’re almost touching one another.”*

Although it initially seemed like these would be two distinct responses, the respondent consistently put them as equivalent this or that alternatives in the CP. One response is of the skinned chickens (the “this”) and the other is of the women carrying luggage (the “that”). This response would receive an IPC code = 0. The skinned chickens are just in D9. They are not carrying luggage or wearing high heels. Thus, the “this” portion of the response contains no IPC elements. Similarly, the women have logically consistent attributes (breasts and high heels) and relationships (carrying luggage). Thus, the “that” portion of the response contains no IPC elements. Had the respondent resolved this percept differently to say the skinned chickens were wearing high-heeled shoes and carrying luggage, it would most definitely receive an IPC score > 0. However, he never did that.

Overlapping or intertwined Incongruous Perceptual Combinations.

At times objects are interacting in an incongruous or implausible relationship and doing so with incongruous or implausible attributes. If the action and attributes are intertwined as part of a single perceptual unit (e.g., “two duck-like birds grabbing a basket with their hands”), this is considered a single instance of an implausible perceptual combination. Similarly, if objects are interacting in more than one illogical way, but those interactions are intertwined (e.g., “two dogs singing a duet and dancing together”), it would qualify as a single instance of an IPC. Finally, if an object has multiple incongruous attributes, but those attributes are interrelated in the response (e.g., “a person with bat wings and bat ears), it again qualifies as a single instance of incongruous perceptual combination.

What follows are additional examples differentiating intertwined and independent elements as variants of a similar response. A single intertwined perceptual unit is the Card II response, “two bears with their hands together in prayer.” On their own, bears with hands would qualify for a mild illogical attribute and bears praying would qualify as a mild illogical relationship. However, because they intersect in the same action, they are considered a single instance of an overlapping perceptual combination. The somewhat similar response of “two bears that have their paws together in prayer and they’re wearing red hats,” has distinct and non-intertwined implausible perceptual combinations. One is the bears in prayer; the other is bears wearing red hats. Because the red hats have no clear relationship to prayer, consider these two distinct instances of incongruous perceptual combinations. Had the respondent instead said, “two bears that have their paws together in prayer; they’re wearing red hats to designate that they are cardinals in the church,” the red hats and praying become intertwined and it would again count as a single instance of an incongruous perceptual combination. However, because the bears are now designated as cardinals, or senior leaders in the Catholic Church, the illogical quality of the response is more severe, justifying a higher IPC score.

Independent Incongruous Perceptual Combinations. In the response below, there are two distinct incongruous perceptual combinations. One involves an illogical relationship, and the other illogical attributes.

III, W, RP: “The same two monkeys are playing the bongos (illogical relationship). Can’t tell if male or female. They’re both male and female. Like with musical notes.” CP: “(ARR) Faces look monkey-like. Arms down low and hand slapping at something. I figured it must be bongos. Even their posture looks monkey-like. That’s why I would guess female (points to breast-like projections, Dd27). That’s why I would guess male (points to penis-like projection, Dd26, establishing illogical attributes). Even these red things look musical to me.”

The incongruous attributes encompass the monkeys being “both male and female.” Independent of this is the incongruous relationship of the monkeys “playing the bongos.” Because these elements are not

intertwined, this is an instance of two incongruous perceptual combinations. Note that monkeys, like most primates, have hands. That aspect of the response is reasonable and does not factor into the decision making process.

Overlapping Incongruous Perceptual Combinations. In the following response, the incongruous perceptual combinations are intertwined and interrelated, reflecting one instance of an IPC.

VIII, RP: *“This looks like a lobster up here (D4) consuming these red lions (D1).”* CP: *“(ARR) This is a lobster. It has all kinds of arms and eyes here. The lions are so angry about being eaten by a lobster they turned red.”*

Although being *“red in the face”* from anger would not be an illogical attribute, a mammal turning red over its whole body from anger is an instance of an illogical attribute. Lobsters consuming lions embodies an illogical relationship. However, the two elements are intertwined by virtue of the redness of the lions being a consequence of being eaten by the lobsters. Thus, these are intertwined illogical elements, and coded as a single instance of IPC.

Both distinct and overlapping Incongruous Perceptual Combinations. The response below has three incongruous perceptual elements, but just two of them are independent of each other.

II, W, RP: *“Two cows in combat, in battle.”* CP: *“(ARR) Shaped like cows, body (points to D1), and head (points to D2). The battle and the clustering of red (points to D3) shows blood dripping out the middle of their bodies. I don’t know why but they have a head like a mouse. The hands (D4) and feet (at Dd28) are here where they are making contact in their battle.”*

In this complex response, three incongruous elements are present, cows in battle, hands on a cow, and cows with mouse-like heads. The first two are intertwined in that the presence of hands on the cows coincides with the cows being in battle, with both reflecting a human-like anthropomorphism of the cows battling each other. Thus, this battle imagery counts as a single instance of an incongruous perceptual combination. Also note that *“cows in battle”* would not automatically be considered an illogical relationship. If characterized in a clearly animal-like manner (e.g., *“two cows in some kind of battle over food”*), an IPC score of zero may be appropriate. In this response, however, they are clearly not engaging in species appropriate aggression, given that the respondent has characterized them as *“in combat,” “in battle,”* and equipped with *“hands and feet.”* Separate from this interrelated imagery, the cows have heads like a mouse. Because this illogical attribute is completely independent of the anthropomorphized battle, it is a second incongruous perceptual combination in this response.

Coding Criteria

IPC = 0.

A score of 0 is given when the perceptual foundation and organization of the response in the inkblot is clearly communicated and logically structured in an appropriately permissive context. The way objects and their features are situated and characterized on the inkblot is reasonable and fully plausible, and no objects have incongruous or impossible perceptual combinations, such that no object has incongruous attributes, subcomponent features, qualities, or actions, and no objects are in an incongruous or implausible relationship.

IPC = 0 examples. The following are examples of responses that would receive scores of IPC = 0. Given their overall clarity and coherence, further comments are not provided for each.

Card I; RP: "A dragon." CP: "(ARR) R: *More the impression with the wings, here's the wings (D2), the body (D4). Just an impression, just the flow, an impression.* (How are you seeing it as an impression?) R: *Dragons have these wings with points like this (Dd34). Just looks like it's ready to take off and take flight.*"

Card IV; RP: "Hmm, this looks like a gorilla at the zoo and it's in perspective, like you're looking up at him, standing close to the cage." CP: "(ARR) R: *Feet (D2), exaggerated... appearance of being tall at that viewpoint [gestures upward to D3] and of course the black fur, the dark fur. That's what I see [speaks quietly].* (What there makes it look like fur?) R: *The coloring, the darker and lighter shades gives it the appearance of fur.*"

Card IX; RP: "If you look down on it, you can visualize all of it as flavors at an ice cream store." CP: "(ARR) R: *Sherbet section; the colors of sherbet.*"

Card III, RP: "It looks like a picture of two people in love (D9). In the middle, here are Valentine hearts that symbolize their love (D3)." Because the hearts are identified as symbolic of love, this response is plausible and therefore coded IPC = 0.

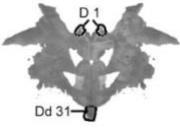
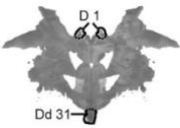
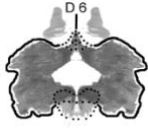
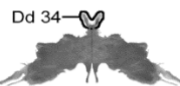

IPC = 1.

A score of 1 is given to a response containing a single mildly incongruous perceptual component, either as an attribute or action of one object or as a relationship between two or more response objects. Responses at this level are mildly implausible or incongruous. Four criteria help to define a mild score. Three of these criteria differentiate the mild level from a higher score, and the other criterion differentiates the mild level from a score of 0. The three criteria that temper severity are frequency, humor or uncertainty, and insight, as described next. First, certain responses, though they contain illogical components, are relatively common, appearing in 2% or more of the R-PAS nonpatient reference protocols. This relatively high frequency reflects card pull, with the respondent incorporating compelling visual features of the inkblot stimulus. Exner (1996) called these features "critical bits" because they are features that make the inkblot look a particular way to many people. Because these responses are so common, they are given a score of 1. Table 2 lists these common responses, as well as the cards on which they occur and the Content, Popular, and Determinant codes that typically accompany them.

Second, the respondent tempers severity if they convey the response playfully or humorously, or if they express uncertainty about it. A common example of humor would be simple, playful anthropomorphisms, such as on Card VI inverted, with "*two bears sleepwalking with their arms held out in front of them, like* (demonstrates walking with her arms out)" followed by a laugh or perhaps a comment underlying the playfulness, such as, "*that's hilarious to think of*" or "*only in Rorschach-land!*" Respondents can express uncertainty, hesitation, or equivocation in many ways, such as to the D3 area of Card VI, "*That looks like a head, but I don't know what that is at the top. Maybe a hat or a horn. It doesn't really look like a hat.*" Alternatively, to Card III, "*I'm not sure. It looks like two people leaning over something. I'm not sure what that is. It looks maybe like an alien or monster head with big eyes.*" Third, a respondent may describe a mildly incongruous attribute or relationship but also express awareness of the implausibility. For example, the respondent might show awareness of an implausibility by saying "*I know it doesn't exist, but...*" "*I probably shouldn't say this, but...*" or "*If you really stretched your imagination, you might say it looked like a...*" followed by a response that would otherwise be assigned an IPC score of 2 or 3.

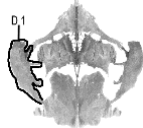
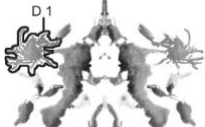
Finally, at the other end of the continuum, two types of responses differentiate mild severity from a fully plausible response. These responses either contain an object with an important element missing element or more than one object together incongruously. These responses could be fully plausible, but they are missing a contextual basis that would make them so. An example of such a response to Card I is “a headless person with a big cape and belt buckle.” Although this percept is not impossible, it is mildly implausible in that it lacks an explicitly permissive context or explanation for the critical feature that is missing. The issues are similar with the Card III response, “Okay, two aliens (D9) with kidneys (D3) in the middle and guitars on the side (D2).” On clarification, the respondent simply described the features of each object. It is possible that the respondent could have provided a context for these objects to belong together in a plausible way. However, without such a context, it is incongruous to have such diverse objects together in the same percept. Responses such as these are milder than would be indicated by a score of 2 but not as clearly logically structured as would be indicated by a score of 0.

Table 2 Common Incongruous Perceptual Combinations that Receive an IPC Score = 1

Location & Object	Image	Description
Card I: W, A with P		Bat or butterfly, with D1 incorrectly specified as antennae ³ , ears, feelers, tentacles, antlers, horns, or hands; or butterfly with Dd31 incorrectly specified as a tail
Card I: W, A but not P		Bird, moth, or other winged insect or animal, with D1 incorrectly specified as antennae, ears, feelers, tentacles, antlers, horns, or hands; or moth or other winged insect with Dd31 incorrectly specified as a tail
Card II: D6, A with M, often P		Two animals interacting in a simple or uncomplicated human way, such as dancing, clapping, giving a high-five, etc. ⁴
Card V: W, A with P		Bat or butterfly, with Dd34 incorrectly specified as antennae, ears, feelers, tentacles, antlers, or horns
Card V: W, A but not P		Bird, moth, or other winged insect or animal, with Dd34 incorrectly specified as antennae, ears, feelers, tentacles, antlers, or horns

³ Of course, antennae for a butterfly would be scored 0, not 1, as it is not mistakenly identified. Not every possible combination in this table (e.g., winged insect with antennae or feelers, bat with ears) qualifies for a score of 1.

⁴ Not infrequently, the human-like action identified in this percept is accompanied by a description including human attributes (typically hands) or a second and related human activity, such as singing. Generally, these elements are intertwined and qualify as a single IPC. However, the addition of human attributes is not covered by this table entry, and thus may push the full response to a score level of 2, rather than 1.

Location & Object	Image	Description
Card VIII: D1, A, typically P		Animal incorrectly specified as being red or pink
Card X: D1, A, typically P		Animal incorrectly specified as being blue ⁵

IPC = 1 examples. The following are examples of responses that would receive scores of IPC = 1, along with brief indications as to why it would receive this score.

Card II: “A *bear dancing*.” Consistent with Table 2, this is a simple, playful anthropomorphism. If the respondent qualified the response by saying “*a bear dancing in a circus*,” this would provide a plausible explanation for the bear’s “dancing” and the response would be scored IPC = 0.

Card II: “*Elephants playing patty-cake*.” As in the above example, this response involves a simple, playful anthropomorphism and, thus, receives a score of 1.

Card VIII: “*Ha! This is kind of funny to think about. It looks like two animals on the side of a tree-like structure. But up here, it looks like the branches at the ends are shaped like hands, helping the animals up. Almost like the trees in that Lord of the Rings movie.*” The respondent presents the response in a humorous manner, is aware of the atypical relationship, and provides an approximate permissive context that links the tree seen here to the animated trees from the film. Furthermore, there is nothing primitive, jarring, or bizarre with the percept reported. Consequently, this receives a score of 1. Note that all the tempering elements (i.e., humor, awareness, and permissive context) do not need to be present at the same time to justify a score of 1 rather than a 2 or higher.

“*A bat with horns on its head*” given on Card I or Card V. Realistically, a bat would not have horns; however, on Cards I and V, this feature occurs relatively frequently (see Table 2). If this response were provided for any of the other eight cards, it would be assigned a score of 2.

Card VIII: “*An otter, with the head here, four legs, but no tail.*” Although it is possible in real life for an otter to be missing a tail, the respondent needs to provide a rationale for this image to eliminate the incongruity and justify a score of 0 rather than 1. Given that otters can live without a tail, had the respondent added even a simple justification in the RP or CP, such as, “*must have lost it somehow*,” that would be sufficient to assign a score of 0.

Card III; RP: “*Two people facing each other (D9) and what’s in between them is the color orange or red (D3).*” At times, respondents may insert “*blotches*” or “*ink*” into a response without any clear connection to the other elements. This constitutes an unexplained relationship unless the respondent provides a plausible context for the color to be present between these people. Of course, the respondent also could elaborate this visual image in a manner that would justify assigning a higher score, for instance, by adding, “*It’s like blood floating by their forces between them.*”

⁵ Certain crabs can be appropriately qualified as blue, e.g., U.S. Maryland blue crabs. If the respondent mentions this distinction, it could establish a permissive context in which the response would be scored 0, as opposed to 1.

Card X: *"The body of a butterfly. No wings, just the body."* As with the previous response, a context is required for the parts that are missing. Had the person added something like, *"this is all that remains,"* it would imply that something happened to that butterfly to make it this way and the response would receive a score of 0.

Card X: *"A flower on a frog."* This relationship is possible, but not likely, thus it is incongruous. Had the respondent added, *"Looks like it just fell on him and he's jumping away,"* the context would resolve the incongruity and the response would receive a score of 0.

IPC = 2.

A score of 2 is given to a response containing a single mildly incongruous perceptual combination, either as an attribute of a single object or as a relationship between two or more response objects. In single object responses assigned scores of 2, the implausible combination may involve an equivalent somatic substitution. For example, a respondent may say, *"there's a dog, he's got hands."* Here, hands are a functional equivalent for paws, and are in the same location as paws would be. Alternatively, the implausibility may occur with humans that are depicted with attributes commonly found in fantasy (e.g., winged, being able to fly). Responses containing two or more objects may involve implausible combinations that are relatively unremarkable and are consistent with inkblot contours, such that the objects are likely to be accompanied by FQo or FQu codes. An example of this would be *"two bugs holding up a post"* to the D8 and D14 objects on Card X.

Other examples of responses assigned IPC scores of 2 include those in which the impossible relationship reflects conventional symbolism or imagery or an implicit mythological or cultural justification. An example of the former would be *"two girls on a flying carpet, flying through the air"* and an example of the latter would be *"a horse with a horn"* with the respondent not stating that it is a unicorn. Finally, a response containing obsessive-compulsive processing or repetition, where there is indecisiveness over the implausible or impossible combination and the incongruity is still relatively mild, would be assigned a score of 2. For example, *"Two women but it looks like bird heads. They look like women, but the head part, right here, looks more like a bird. The nose is more like a beak, and they don't really have any hair. Not really a bird and not completely a woman."*

Scores of 2 apply to responses that are not accompanied by any of the three criteria that temper severity to justify an IPC score of 1. Thus, the response is not one of the frequent ones listed in Table 2. Second, the respondent conveys the response deliberately or with conviction, without the playfulness, attempted humor, or hesitant uncertainty that would warrant a Level 1 score. Third, the respondent does not recognize or address the incongruous perceptual combination during the RP in a way that suggests an awareness of the implausibility, though this recognition may emerge during clarification.

IPC = 2 examples. The following are examples of responses that would be scored IPC = 2, along with brief indications as to why it would receive this score.

"A horse with wings." Without referring to or alluding to Pegasus, score 2.

"A flying bat holding on to a bird in flight." Highly implausible relationship.

"A bear; just the head; it's a green bear." Simple, yet implausible, color-object combination.

"Two dogs boxing, their hands here, and blood is here." This Card II response has two intertwined attributes (dogs boxing and dogs with hands) that qualify as a single IPC because they are interrelated. Dogs boxing could qualify for a level 1 score according to Table 2. However, with the addition of the hands as an additional perceptual element, Table 2 does not apply. In addition, it does not meet the other criteria that would qualify it as the type of response that

would warrant a level 1 score (i.e., it is not a playful anthropomorphism, and the respondent does not spontaneously recognize the incongruity of what is being seen during the RP).

“A praying mantis playing cards. You can’t see the cards, it’s just the way the mantis is holding its hands.” Illogical situation in which human actions and features (i.e., playing cards and hands) are attributed to an animal (i.e., praying mantis).

“A person with a penis and breasts.” The contradiction between subcomponents of this response represents an implausible (though not necessarily impossible) combination. If the respondent qualified the response, for example, by identifying the person as a hermaphrodite or transsexual, this would provide a permissive context, indicating that a score of IPC = 0 should be assigned.

“A bear doing a real good jitterbug move in a circus.” A “circus” does not explain or account for a bear doing “a real good jitterbug,” so it does not constitute a permissive context. A bear undertaking that move is implausible even in a circus. If the response were delivered playfully, a score of 1 would be assigned.

“Bugs, worms, crickets at a party.” In this response, the implausibility is found in the overall integration or organization of objects. As in the previous example, if the response were conveyed playfully, it would be scored 1.

“Elephants carrying two big deer, and a hippo, like a circus acrobatic thing.” In this response, the context of “a circus” helps to explain the illogical relationships, but it is insufficient to account for the implausibility of the relationships between these animals.

IPC = 3.

Scores of 1 or 2 encompass a single incongruous visual element that is relatively mild. A response is given a score of 3 when there are multiple distinct and mildly incongruous elements (as described above) or a single more severe lapse in visual coherence. In the latter case, the response has a prominent incongruous perceptual combination that is jarring or strange, despite being clearly communicated otherwise. This combination may be a bizarre amalgam of attributes or features within a single object, such as “a guy with two heads for feet” or “a winged penis.” Alternatively, there may be a patently impossible relationship between two or more response objects, such as “Two people and in between them are their hearts” on Card III.

IPC = 3 examples. The following are examples of responses that would be scored IPC = 3, along with brief indications as to why it would receive this score.

“A person with a penis and breasts. This person could get himself pregnant.” Although people in many cultures increasingly see gender identity as non-binary, people generally consider secondary female and male sexual characteristics to be mutually exclusive. As such, a perceptually based conceptual condensation has occurred and it is accompanied by reasoning that reinforces the condensation in a jarringly impossible manner. Note, however, that if the respondent clearly delivered the second sentence in jest, a score of 2 would be assigned.

“An animal, four-legs, like a goat, and at the top a person’s head.” The co-occurrence of human and animal features in one organism is more bizarre than the kinds of odd attributes coded at Level 2, and it is presented without a context that would account for the otherwise impossible combination. If the respondent had referred to it as a mythical creature or labeled it a satyr, for example, depending how it was elaborated, the response would be assigned a score of 0, 1, or 2.

Card III, **“Two people and in between them are their red hearts.”** This response should be scored 3, guided by the assumption that the D3 red area is two, real, anatomical hearts, residing outside the bodies. However, if the respondent were to give a meaningful and understandable

justification or rationale, a lower score or score of 0 would be considered. For example, if the respondent added, “*they are in love,*” it would suggest the hearts are representational, which in turn would suggest a score of 2 rather than 3. Alternatively, if the respondent was explicit about this representational quality by, for instance, saying in the CP that the hearts “*represents their being married,*” a score of 1 should be considered. Such a response also could be clearly communicated in a logical way so that it would receive a score of 0, such as by referring to the hearts as Valentine-type hearts during the RP (see Table 5 for examples on a continuum).

Card V: “**An alligator, two heads, one on each side, and another for a tail.**” This example of scrambled body parts justifies a severity level of 3. Had it been described just as “A two headed alligator” a score of 2 would have been appropriate, and if the respondent referred to actual instances of double headed reptiles, it would possibly warrant a 1 or even a 0, depending on when this was indicated and how it was framed.

“*The moon here is convincing this guy to rise up.*” Misattribution of human agency.

“*A bird extending its landing gear.*” Jarring animate-inanimate combination.

Card III, RP: “*The same two monkeys are playing the bongos. Can’t tell if male or female. They’re both male and female. Like with musical notes.*” CP: “(ARR) R: *Faces look monkey-like. Arms down low and hand slapping at something. I figured it must be bongos. Even their posture looks monkey-like. (Respondent points to breast-like projections, Dd27, and then to penis-like projection, Dd26.) That’s why I would guess female. That’s why I would guess male. Even these red things look musical to me.*” This response includes multiple illogical elements, though they are relatively mild, including the monkeys being “*both male and female*”⁶ and “*playing the bongos.*” Either of these in isolation would receive a lower score; however, the presence of multiple illogical percepts in a single response indicates that IPC = 3 is the appropriate score.

“**Two people physically attached to one another.**” This is a markedly implausible relationship. If “*like conjoined twins*” were added, it would provide a permissive context, and the response would be scored 0 if it was stated in the RP, or 1 if it was stated in the CP. However, if it were elaborated further with another impossible relationship, for example, “*their identities are intertwined,*” the score of 3 would remain or perhaps increase, depending on how its content and clarity.

Card V: “*A deer-bat. The deer is in the center (D7) with the horns and feet. The wings are on the outside (D4) so that it can fly.*” A score of 3 is assigned for odd combination of features on this animal.

“**A conductor with a butterfly on his back. The butterfly is helping him conduct.**” Impossible relationship involved with “a butterfly on his back... helping him to conduct.”

IPC = 4.

There are two ways a respondent can provide a response scored IPC = 4. First, there can be two or more instances of the notably or markedly incongruous visual attributes or relations that qualify for a Level 3 score. These then are responses with more than one prominent lapse in visual coherence, characterized by jarringly or strangely incongruous attributes or relationships. As with Level 3, the combinations may reflect clearly strange attributes or features within a single object, patently impossible relationship between two or more response objects, or some combination of single objects and interactions between distinct objects. Second, the response may contain one instance of an incongruous perceptual combination that has primitively bizarre or primitively contradictory elements.

⁶ As noted earlier, percepts of humans with contradictory sex characteristics may receive a lower-level score or even a score of zero (e.g., hermaphrodites), depending on the rest of the response.

Primitive features encompass sexual, aggressive, infective, invasive, excretory (including vomit or pus), inner organ, digestive, reproductive, menstrual, profusely bleeding, malignant, decaying, gory, explosive, inflamed, destructive, sadistic, cannibalistic, demonic, or mutilated imagery. Skeletal or dental imagery may qualify if the respondent elaborates it in a crude, offensive, or disgusting manner. Importantly, however, the co-occurrence of illogical attributes or relationships and the content codes of An, Bl, Ex, Fi, or Sx, or thematic codes of MOR, AGM, AGC, or MAP does not, in and of itself, constitute primitively bizarre and primitively contradictory elements. Rather, primitive imagery is more severe. Although it is challenging to define the lower boundary of primitiveness⁷, responses have a jarring, “gross” quality and may contain crude elaborations or unsocialized expressions of underlying sexual or aggressive drives or crude or disgusting elaborations.

Primitive imagery is not just what one would never say at a holiday dinner with family, but what one would never say to anyone – except perhaps to deliberately evoke a disgust or shock reaction. In this regard, context matters. For instance, saying that the commonly used D9 figures to Card III are humans with breasts and a penis is a sexually relevant but non-primitive incongruous perceptual combination. Identifying Card IV as a turkey ready to be eaten and then identifying the lower D1 area as its penis, however, is a sexually relevant and primitive IPC. Similarly, describing the commonly used figures on Card VII as two old women talking to each other while kicking each other with a big shoe (D4) is an aggressive but non-primitive IPC, whereas describing those old women talking to each other while eels (D4) are eating their lower body is an aggressive and primitive IPC.

Below are examples of responses that contain illogical attributes or relationships, along with the previously mentioned content or thematic codes, but that are **below threshold** for primitive imagery. Examples of above-threshold responses are included under the subheadings *IPC = 4 examples* and *IPC = 5 examples*, with the primitive content underlined.

Card III; RP: *“Two people connected at the heart.”* CP: (ARR) R: *Here are the hearts (D3), it looks like they are connected. And it seems like these people (D9) are connected at the heart since the hearts are connected.”* This response contains a markedly implausible relationship (two people connected at the heart) and would receive a content code of An for the presence of an internal organ; however, it lacks the sort of elaboration that would qualify as primitive imagery. If the respondent had said the two people were also mutilated and profusely bleeding, for instance, the response would surpass the threshold and would be considered primitive.

Card IV; RP: *“This is that weird one; looks like a turkey looking at you, turkey beak, turkey wings, maybe cut in half.* CP: *“(ARR) R: There is the beak, wings hanging there, there it is wide open, ready to be cut. (Cut in half?) R: Wide open, so he’s laying on his back. (Help me see it like you do.) R: Split down the middle, ready to carve.”* This response contains a damaged object (turkey split down the middle) with an implausible combination of attributes (being served for dinner while also still having its beak and wings). However, without additional elaboration (e.g., profuse bleeding,

⁷ James Kleiger referred to this challenge as akin to the challenge of defining pornography; it is very hard to say where the boundary is crossed, but most people know it when they see it (personal communication, October 9, 2018). Most definitions of pornography indicate how it is stimulus material designed to elicit sexual arousal in the consumer, as opposed to other types of reactions (aesthetic, emotional, educational). With primitiveness, the respondent may or may not intend to evoke a particular kind of reaction from the assessor, but among most assessors, it would elicit a disgust or shock reaction.

maggot infestation, mutilation), the percept is not severe enough to be classified as primitive imagery.

Card IX; RP: "A fire-breathing dragon with clown shoes on. CP: (ARR) Okay, here's the nose of the dragon, here is the head back here, here are the flames, and smoke, and the red things look like clown shoes to me, so it's wearing clown shoes." This response contains aggressive content (fire-breathing dragon), as well as an implausible combination of attributes (dragon wearing clown shoes). However, it does not contain the jarring quality or crude elaboration that exemplify primitive IPC responses.

IPC = 4 examples. The following are examples of responses that would be scored IPC = 4, along with brief indications as to why it would receive this score. Primitive imagery is underlined.

Card X; RP: "Two **potatoes** (D8) **with eyes and a mouth trying to climb up an erection** (D14)." Although potatoes have what are called 'eyes' in English, seeing actual eyes and mouths are bizarre attributes on potatoes, which in turn are engaged in an absurd, impossible sexualized interaction.

Card III: "**Two monkeys packing up to leave for a trip** (D1), **with two flamingo children doing a dance in the background** (D2). A **big red tie** (D3) **went into the bag.**" Separately, the three elements in this response would not merit scores of 4; however, taken together as parts of a single response, the connections are all highly incompatible.

Card IX; RP: "A piece of **rotting meat soaked in menstrual blood.**" This primitive response represents a major breakdown in censorship and a bizarre relationship between different elements of the response (i.e., meat in menstrual blood).

"It's a **person standing, here's the face, body, and you can see the heart inside pumping blood.**" This response is scored 4 for the impossible transparency and primitive internal anatomy.

Card VI; RP: "A mountain **cat ripped open at his stomach.** Looks like **the back of him got some kind of demon comin' out, two of 'em, or three.**" CP: "(ARR) R: It reminds me of a bear rug **ripped open. Demon horns down there** (Dd33), **two down there, real sharp.**" The primitiveness of the imagery in this response combined with the impossible relationship qualifies it as a 4.

"**Four legs sitting on a butterfly. They're crossed.**" The jarring incongruity of one object with impossible or implausible attributes (four human-like crossed legs) combined with the impossible relationship (sitting on a butterfly) qualify this for a Level 4 score.

Card VII; RP: "Two old girls with a beret **chopped in half looking at their stomach.** CP: (ARR) R: Here and here, both little girls. See the jaws there and the beret and they are **chopped in half** and look at the stomach there. (WMLL a stomach?) R: Because it is bent and that's where the stomach area is." This response is scored 4 for the implausible attributes and instance of primitive content (two girls chopped in half and looking at their stomach).

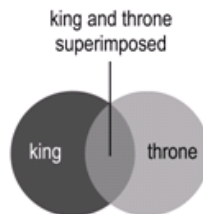
IPC = 5.

A score of 5 is given to two kinds of responses. The first includes responses containing two or more instances of the markedly incongruous visual attributes or relations accompanied by primitively bizarre or primitively contradictory elements and qualify for a Level 4 score. The difference between Level 4 and 5 scores is that at Level 4 there is just one markedly illogical attribute or relationship accompanied by primitive imagery, while at Level 5 there is more than one illogical combination accompanied by one or more types of primitive imagery. As with Level 4, primitive imagery includes reference to sexual, aggressive, infective, invasive, excretory, inner organ, digestive, reproductive, menstrual, profuse bleeding, malignant, decaying, gory, explosive, inflamed, destructive, sadistic, cannibalistic, demonic, or

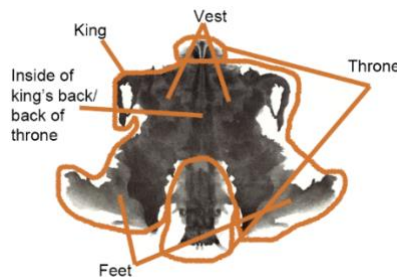
mutilated imagery. Skeletal or dental imagery may qualify if the respondent elaborates it in a crude, offensive, or disgusting manner.

The second type of response that qualifies for a Level 5 score is one that possesses a blatantly impossible visual structure, such that the respondent visually superimposes response objects on one another, so they simultaneously occupy the same inkblot region in a markedly impossible way. In other words, there is an impossible visual interpretation of the inkblot, such that the respondent sees one area as two objects simultaneously in an impossible way. We stress that when this occurs, the respondent is seeing two different things simultaneously in one area, not seeing one thing with atypical and distinctly located attributes. Often, these responses incorporate fragmented and fluid qualities, though the key characteristic is the visual condensation of objects. It is difficult to grasp this phenomenon based solely on written descriptions, and the schematic representation in Figure 3 may help.

Figure 3. Schematic of Visually Superimposed Objects for IPC = 5.



This figure refers to the following response verbalization to Card IV, which also is illustrated below with a location image: *“I see a throne and a king with his insides there (points to middle of Card IV), inside his back, and his back is the back of the throne, in the middle there. A vest, yes, he’s wearing a vest too there (again points to middle of Card IV). Feet there and top of the throne, at the top up here of course.”* This response depicts an impossible situation in which at least two distinct perceptual elements (throne and king) simultaneously occupy the same space, indicating that it should be scored IPC = 5. This is in contrast, for example, to a slightly different response, such as a king that has a throne as his back, or a throne with the back, head, and legs of a king. Either of the latter are very atypical and impossible amalgams, but they are of one cohesive object possessing incompatible parts, and would be scored at Level 3 or 4, depending on how they were communicated. In addition, if the response simply consisted of a vested king sitting in a throne, with the throne not fully visible behind the king, the response would properly be coded a 0.



As the preceding text suggests, there are several challenges associated with determining whether a Level 5 score is warranted for a visually superimposed response. They revolve around the difficulty of determining what someone is seeing based on what they are saying and how they may be gesturing. For these distinct but visually superimposed response objects, it is important to be sure the respondent is

not describing two different things (e.g., a king and separately a throne). Similarly, it is important to be sure the respondent is not providing a This-or-That response, in which the respondent identifies two alternative possibilities for the same object (e.g., “*This looks like a bird or a butterfly; could be either,*” or “*it looks like two dogs kissing or they might be two bears fighting*”). Third, it is important to be sure it is not one object with an inappropriate attribute (e.g., to the W of Card I, “*a bat with an insect body*”). If in doubt, code conservatively.

IPC = 5 examples. The following are examples of responses that would be scored IPC = 5, along with brief indications as to why it would receive this score. To foster clarity, we differentiate the responses by subtype.

Multiple Instances of Markedly Incongruous and Primitive Visual Combinations

- Card II; RP: “**Two rabbits making a blood oath.**” CP: “(ARR) R: *Yep... Here’s the two rabbits (D6), their ears here (Dd31), and here’s blood (D2) and here’s blood down here (D3) where they are knocking their knees together. They are putting their hands together making an oath.*” The respondent combines preposterous and primitive imagery in an impossible relationship (rabbits making a blood oath) with impossible elements (rabbits with hands and knees).
- Card II; RP: “**Oh, two women again with breasts, and each have a penis. They both seem to be doing something, I don’t know what. It is almost as if their hearts are out of their chests. It’s almost as if the thing in the middle is a demon, not good, and that there is some sort of ritual going on to satisfy the demon.** ... Each one is holding something in their hand, a bag or something, and they have their hands on this demon, to control it, to keep it from coming up.” CP: “(ARR) R: *Right, so the breast is here (Dd27), penis here (Dd26), they are looking at each other, then down here is his teeth. Here is their hearts out of their chests, here they are like holding this thing down (D7) and then they, it is some bag for the ritual that they are holding in each hand, each one. (What makes it look like it’s hearts?) R: It’s red, and really it looks like this would be a heart (Dd29), and lungs (D2), just like body parts that have been removed from their bodies, like the demon was taking over, but they are trying to stop it. (What makes it look like a demon?) R: Teeth are sharp, almost like a crustacean, heart helmet on a head, coming from hell because it’s a demon, they are trying to hold it down.*” The women with penises reflect notably incongruous visual attributes, which the anatomical parts outside of their body and their efforts to hold a demon down reflect notable incongruous perceptual relationships. The primitive imagery encompasses internal anatomy, demonic and satanic forces, and aggressive imagery.
- Card V; RP: “**Oh boy, this looks like a bat that got with a rat that became entwined with infestation. Cause it looks like a spider disease and sickness.**” CP: “(ARR) R: *Yes, well the inward looks like the bat (D7). With the horns (Dd31) it made it a bat, or else the inside would have been a rat. Plus there are the wings (D4) which is for bats. Otherwise they would be in the same family. One zooms and one dooms, yes it does.*” This confusingly stated response mixes elements of bats, rats, spiders, a horned creature, infestation, disease, and doom. Both the horned bat and the entwined bat-rat-infestation carry illogical attributes and the repeated references to infestation and disease carries the primitive element.
- Card V, v: “**A rabid butterfly on the attack. Looks like it’s dive-bombing, with claws in the back and sharp horns in the front.**” The state (rabid), action (on the attack, dive-bombing), and attributes (claws and sharp horns) are bizarrely incompatible with the nature of the object (butterfly) and reflect multiple incongruous perceptual combinations. Its rabid state and aggressive attributes and actions reflect two types of primitive imagery.

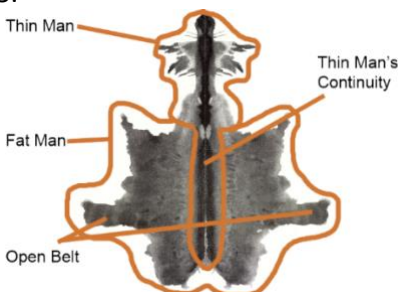
Card II, W, RP: “Two cows **in combat, in battle.**” CP: “(ARR) Shaped like cows, body (points to D1), and head (points to D2). The battle and the clustering of red (points to D3) shows blood dripping out the middle of their bodies. I don’t know why but they have a head like a mouse. The **hands (D4) and feet** (at Dd28) are here where they are making contact in their battle.” This response contains multiple incongruous and primitively contradictory features. The cows characterized as “in combat,” “in battle,” and equipped with “hands and feet” constitute one interrelated IPC. However, they also have mouse-like heads. Theoretically, “cows in battle” is strangely illogical because cows are normally docile animals that never stand on their hind legs. Had this been a percept of animals that commonly engage in aggression (e.g., bulls, bears, or lions) or that stand on two legs (e.g., squirrel, bear), it would have been less preposterous. Thus, these cows are clearly not engaging in species appropriate aggression. In addition, the response carries two types of primitive imagery, with aggression and bleeding. In combination, these features contribute to the Level 5 classification.

Card X; RP: “**Spiders and dead bodies laying on the ground with their heads cut off, and put on fire wired to the fuels.**” CP: “(ARR) R: Dead bodies here lying on the ground (D9), the fuel (D1) and the wire (D7) to their calf muscle, shoes (D13), heads (D8) went back on. (What makes it look like fuel?) R: I worked with it before, the color and the shape.” Although the assessor apparently lost track of the spiders, this is a bizarre and jarring response with highly implausible relations (dead bodies wired to fuel) accompanied by two types of primitive imagery (death and dismemberment, put on fire).

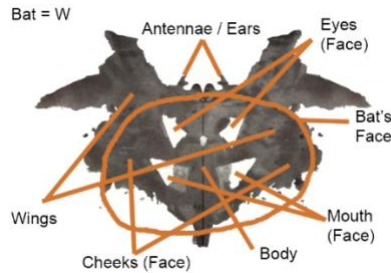
Card VI; RP: “This looks like a **vulva with fangs, like a pussy with fangs.** I should have said a vagina, excuse my language. CP: (ARR) R: When I look at it I see a woman’s vagina right here. This is the open part, and then I see the fangs. Once the male penis goes in it is trapped and can’t come out, because if he does it will be ripped.”

Impossible Objects Visually Superimposed

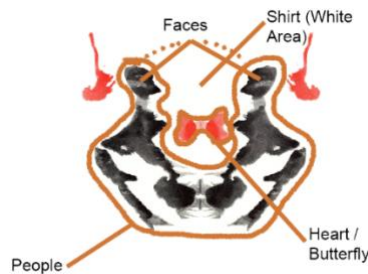
Card VI; RP: “It’s a man in the upper part (D8). The lower part (D1) looks like more a whole man. **Two that integrated to one.**” CP: “(ARR) R: Two men. The fat man and the thin man, Laurel and Hardy, something like that. Standing, the thin man and this (D12) his continuity. The more bright (around D12), see like inside, this shadow (D12), it is his continuity, it is his legs and here is the bigger trousers. It looks like an open belt (Dd24) that had to be closed, but he, the thin man, going inside so he will close [the belt] immediately. (“Two that integrated to one?”) “**Two connecting the fat man and the thin man, he will not take unintentionally big trousers—it belongs to somebody. It is the fat man’s trousers.**” Here, the fat man and the thin man are part of the same object, looked at from both the same and slightly different vantage points. This example illustrates how profound the perceptual distortions and communication failures can become with IPC scores of 5.



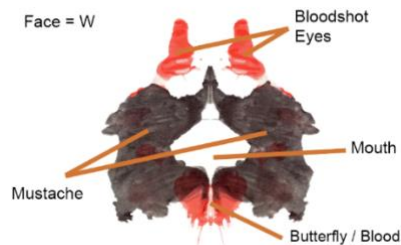
Card I; RP: "That's a bat." CP: "(ARR) R: Yes, here's **the wings** (D2), **the antennae or ears** (D1), and **body** (D4), **face** (central area), **cheeks** (lower D2), **mouth** (DdS29), and **the eyes are these white spaces** (DdS30). *It's flying.*" This response to Card I reveals the simultaneous perception of a face of a bat and the body of a bat, with both occupying the whole location. In this response, the respondent superimposes the face and body and fuses them on top of each other.



Card III; RP: "It's a person standing." CP: "(ARR) R: Here's the face (Dd32 and space above), body (D1), and you can see the heart pumping (D3). He has the red, double butterfly symbol (also D3) on his white shirt (DdS24) and heart." In this response, a score of 5 is established because both the "heart" and the "symbol" are visually condensed or superimposed, "one on top of the other" on the red D3 area. Thus, the D3 area is simultaneously both a heart and butterfly symbol.

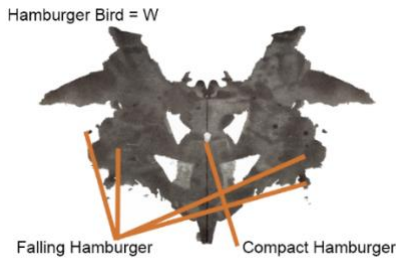


Card II; RP: "A guy with a big mustache, bloodshot eyes, and red ketchup all over his lips." CP: "(ARR) R: He's eating **the butterfly** (D3) that just flew into his mouth (DS5). He has a full-fledged mustache (D6) that's been cut with **the blood there** (D3)." This fluidly changing response is assigned an IPC score of 5 because the butterfly and blood (and presumably the ketchup) both reside in the same D3 area. This response also contains the incongruous perceptual combination of a guy eating a butterfly.

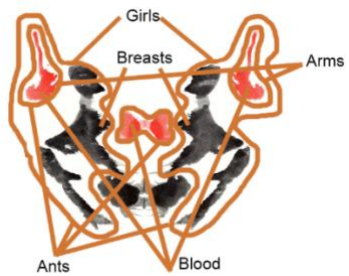


Card I; RP: "It looks like a... hamburger bird. Like what you call it, a hamburger falcon, like the vultures, teradicious." CP: "(ARR) R: You see how **this side** (D2) **is fallen down like it's half of a bird**, like all the inside is the numbers 1, 2, and 3, like hamburger and he's wishin' for the inside. See, **the hamburger is fallin' on the outside** (D2) and the bird's wishing for the inside (D4)." This

confusing response has both the hamburger and the bird residing in the same space (D2), along with generally confusing communication about numbers and a neologism (teradicious).



Card III; RP: *“They look like ants. Ants with no feet.”* CP: *“(ARR) R: These four (D9, D2, D3), two girls (D9), see the ants? And they got no feet. (Girls?) R: Right there (D9), because they got breasts (Dd27). This one over here has one arm (D2), this one ain’t got no arms (D3). Just looks like ants. Ants have a big head and I can squish ‘em. I can squish ‘em and there’s blood everywhere. (Blood?) R: Right there (D2, D3), it’s blood, it’s blood (points again to D2 and D3).”* This is another shifting, fluid response, with both ants and girls residing in D9 and both ants and blood residing in D2 and D3, consistent with a score of 5.



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Appendix A

Examples of Similar Percepts at Different Levels of Disorganized and Confusing Communication

Score	Largely Digressiveness	Largely Problematic Word Use	Largely Nonsensical Responding
0	<p><i>Card V, RP: Butterfly, a black butterfly. Actually, it's not a butterfly, it's a bat, because it's black, and bats are traditionally black. CP: Right, at first I thought it looked like a butterfly, but then I said bat because it's black, like a bat. And then the legs here (D9), head here (D6), and ears here like a bat would have. And these look like bat wings (D4), They're stretched out, so it looks like it's flying.</i></p>	<p><i>Card X, RP: Lots of different sea creatures and seashells. They don't look real exactly, but it could be an abstract painting. CP: Sea creatures. The ones with shells, like mollusks or crustaceans. Lots of different types. This could be a turtle, because it looks like it has a shell on its back. Then there's this green at the bottom that could be algae or sea grass. It looks abstract because of the color and because they don't look real.</i></p>	<p><i>RP: A giant. Or monsters, like it almost looks like it could be two monsters standing back to back against a wall or something. CP: Yeah, looks like they're just standing back to back. Here's their big hands and curled arms like this (gestures). And here's the big legs and feet. Small heads though, like it could be a picture taken from below, with perspective.</i></p>
1	<p><i>RP: Butterfly, a black butterfly. Actually, it's not a butterfly, it's a bat, because it's black, and bats are traditionally black. I like bats, do you? CP: Right, at first I thought it looked like a butterfly, but then I said bat because it's black, like a bat. His legs are here (D9), head here (D6), and ears here. And these look like bat wings (D4). They're stretched out, so it looks like it's flying.</i></p>	<p><i>RP: Lots of different sea creatures and seashells. They don't look real exactly, but it could be an abstractacus painting. CP: Sea creatures. The ones with shells, like mollusks or crustaceans. Lots of different types. This could be a turtle, because it looks like it has a shell on its back. Then there's this green at the bottom that could be algae or sea grass. It looks abstract because of the color and because they don't look real. (neologism [abstractacus], but, given that the respondent mentions painting and color, the misused word can be recognized as a substitute for abstract, the term asserted in the CP)</i></p>	<p><i>RP: A giant. Or monsters, like it almost looks like it could be two monsters standing back to back against a wall or something. And like I'm down here (points to D1) looking up. CP: Ya, looks like they're standing back to back. Here's their big hands and arms curled like this (gestures). And here's the big legs and feet. This almost looks like they could be bending their knees and getting ready to take a step forward. Small heads though, like I'm taking a picture looking up from below them.</i></p>
2	<p><i>RP: Butterfly with ears, a black butterfly. Actually, it's not a butterfly, it's a bat, because the color is black and bats are traditionally black, and they have ears –</i></p>	<p><i>RP: Lots of different sea creatures and seashells. They don't look real though. Abstractacus creatures. CP: Sea creatures. The ones with shells, like mollusks or</i></p>	<p><i>RP: A giant. Or monsters, like two monsters standing back to back. It's almost like I'm lying down here and they're staring down at me (points to D1). CP: Yeah, they're just</i></p>

	<p>butterflies don't. I love bats. I think they're extraordinary animals, don't you? CP: Right, I thought it looked like a butterfly, but I've never seen a black butterfly, so I said bat because a bat would be black and have ears. His legs are here (D9), head here (D6), and ears here. And these look like bat wings (D4). They're stretched out, so it looks like it's flying. I've seen from movies that bats can fly.</p>	<p>crustaceans. Lots of different types. This could be a turtle, because it looks like it has a shell on its back. Then there's this green at the bottom that could be algae or sea grass. They don't look like real creatures, they're more abstractacus. (strange word usage [abstractacus] without reference to painting or color to aid in interpretation)</p>	<p>standing back to back, glaring sideways down at me. They have big hands and curled arms like this (gestures), like they could be getting ready to reach out. And big feet. This almost looks like they could be bending their knees and getting ready to take a step forward.</p>
3	<p>RP: Butterfly with ears, a black butterfly. Actually, it's not a butterfly, it's a bat. I'm a batman person, I like bats. I think they're extraordinarily animals and creatures. Besides the color is black, and bats are traditionally black. CP: Basically why I said that is because he has legs here (D9) and ears. And wings stretched out, like it's flying, and I've seen from movies that bats can fly, like batman. That's what brought it to my mind. I'm a batman fan. Did you see the last movie?</p>	<p>RP: Lots of different sea creatures, mostly shelled creatures. Abstractacus shelled things, not ordinary things. CP: Hard shelled creatures. Belonging to a certain placement or development of sort. What're those called? This is like a (D7) something with a back cover shell, a turtle. And other different sorts of shelled creatures. I can't remember the placement. Then there's something like the (D10) the green at the bottom is like a... ah um it has no identification. What's that stuff called? (multiple lapses in communication that interfere with assessor's ability to understand what is in the response)</p>	<p>RP: A giant. Or monsters, like two monsters standing back to back. Staring down at me, I'm lying down here (points to D1) and they're glaring down. CP: Yeah, they're just standing back to back, glaring sideways down at me. They have big hands and curled arms like this (gestures), like they're reaching out to scare me and say 'Yah!' And big feet.</p>
4	<p>RP: Butterfly with ears, black butterfly, butterfly with two legs to the side. Actually, not a butterfly, a bat. 'Cause I'm a batman person, I like bats. I think they're extraordinarily animals and creatures. Besides the color is black. CP: Basically why I said that is because he has legs and I have seen from movies that batman can fly, bats can fly. It just opened up the question that</p>	<p>RP: Lots of different sea creatures, mostly abstratus or shelled creatures. Shelled things or creatures or things out of the abstratus. Abstratacus things, not ordinary things. CP: Hard shelled. Belonging to a certain placement or development of sort. There's like a (D7) something with a back cover shell. Like I can't remember what you call it... turtle. And different sorts of sea creatures.</p>	<p>RP: A giant. A monstrous giant, a monster. Two monsters standing back to back up against the wall. Staring, glaring at me. I don't like this one! (turns card face down on table) CP: Yeah, just standing back to back, standing sideways through the atmosphere, and glaring at me, staring. That's me there, scared and tense. Two people, but they got hands like giants, two monsters, two human</p>

was on my mind that someone was airbrushed this as a performance of a bat. Yes, a bat. I'm a batman fan. Did you see the last movie?

5

RP: Butterfly with ears, black butterfly with ears, black butterfly with two legs to the side. Actually, not a butterfly, a bat, not a butterfly. I'm a batman person, I like bats, not so much cats, rats, or hats. I think they're extraordinarily animals and creatures. Defiled roughly. Besides the color is black. CP: Basically why I said that is because he has legs. Used to kill their food before they absorb it, like on thriller. It just opened up the question centrally but metaphysically that was on my thought that someone was airbrushed this as a performance of a bat. Yes, a bat. I'm a batman fan. Didn't get to see the last movie.

Then there's something like the (D10) the green at the bottom is like a centrifical or ah um unprovisional or um revisable or um... it has no identification.

RP: Lots of different sea creatures, mostly abstratus, abstratacus, shelled creatures. Shelled things, creatures or things out of the abstratus. Abstractacus things, not ordinary things. CP: Hard shelled. Belonging to a certain absteferance or requoirain. A certain placement of sort. There's like a (D7) something with a back cover. Different sorts or sea creatures. Or some development. Then there's something like the (D10) the green at the bottom is like a centrifical or unprovisional or umrevisable.

beings making it look like a shadow. Big arms, curled. Hands put out like (gestures). Want to scare me, say 'Yah!' I really don't like this one.

RP: A giant. A monstrous giant, a monster. Two monsters standing back to back up against the wall. Staring, glaring, flaring at me. Like they wanna get me. Stop this! (tosses card on table). CP: Yeah, I really don't like this one. Standing back to back, standing sideways through the atmosphere, and the glare, taking a glare at me, stare, open flare. That's me, scared up in tension, decaying nerve point. Two people, got hands like giants, two monsters, two human beings making it look like a shadow. Big arms, curled, unfurled. Hands put out like (gestures). Wants to scare me, maybe get me. YAH! Bloody right. Bloody left.

Appendix B

Examples of Similar Percepts at Different Levels of Illogical Verbal Justification

Score			
0	<p><i>Card VII, RP: Two kids, maybe two girls making faces at each other. It kinda looks like they're just shapes in the clouds 'cause the edges are blurred. CP: Two girls because it looks like they have ponytails and poofy bangs (D5). They're looking at each other, eyes, noses. I said making faces at each other 'cause something about it makes it look playful, maybe it's 'cause it looks like they're leaning in and kinda jutting they're chins out (Dd24) and flipping their arms out behind them (Dd21). You can only see their heads (D1) and upper bodies (D3), and it's also kinda hazy or blurry at the edges, so I thought it looked like a shape in the clouds, like you might see if you were watching clouds pass on a sunny day.</i></p>	<p><i>Card X, RP: I see a rabbit with green eyes. It reminds me of the rabbit from that book, Bunnacula, because that rabbit had eyes that turned bright green when it was doing something bad. CP: That's the rabbit head right there, here's the two eyes and big tall ears. And with the green eyes it reminded me of the rabbit from Bunnacula. I know that's pretty obscure, but that's what came to mind.</i></p>	<p><i>Card X (v), RP: A butterfly, like the kind I used to see in my garden back when I lived in Arkansas. CP: Here, in the middle reminds me of a butterfly because of the bright colors. The wings would be here with the red, purple, and a little blue and white. See how it's the same on both sides? Like a butterfly's wings. And then in the middle would be the body, and this green would be the head, like with antennae. And all the other colors around it, the blue and yellow and orange (points to each), remind me of flowers.</i></p>
1	<p><i>RP: Two kids, maybe two girls making faces at each other. It doesn't look real though. It looks like they're just shapes in the clouds. CP: Two girls because it looks like they have ponytails and poofy bangs (D5). They're looking at each other, here's the eyes and noses. I said making faces at each other 'cause something about it makes it look playful, maybe it's 'cause it looks like they're leaning in and kinda jutting they're chins out (Dd24) and flipping their arms out behind them (Dd21). You can only see their heads (D1) and upper bodies (D3). (WMLL clouds?) It's gotta be clouds 'cause, first of all,</i></p>	<p><i>RP: I see a rabbit with green eyes. It could be an evil rabbit because of those green eyes, like it's something out of a sci fi movie. CP: That's the rabbit head right there, here's the two eyes and big tall ears. And with the green eyes it reminded me of the rabbit from that book, Bunnacula, with the bright green eyes, I think that was an evil rabbit.</i></p>	<p><i>RP: A butterfly, like the kind I used to see in my garden back when I lived in Arkansas. CP: Here, in the middle, it looks like a butterfly to me. (WMLL a butterfly?) I just saw all the colors and thought it has to be a butterfly! Here are the wings with the white and the bright red, purple, and blue. See how it's the same on both sides? Like a butterfly's wings. And then in the middle would be the body, and this green would be the head, like with antennae. And all the other colors around it, the blue and yellow and orange (points to each), could be flowers.</i></p>

you can't see their whole bodies, and, second, the picture is hazy and the edges are blurry.

2

RP: Two kids, two girls making faces at each other. It doesn't look real though. It looks like they're just shapes in the clouds. CP: Two girls because of the ponytails (D5) and poofy bangs (D8). They're looking at each other, here's the eyes and noses. There's two girls, **and they're kids, so they have to be playing, that's why I said they must be making faces at each other.** Look, like they're leaning in and kinda jutting they're chins out (Dd24) and flipping their arms (Dd21) out behind them (postures). You can only see their heads (D1) and upper bodies (D3). (WMLL clouds?) **It's gotta be clouds 'cause, first of all, you can't see their whole bodies, and, second, the picture is hazy and the edges are blurry.**

RP: I see a rabbit with green eyes. **It must be evil because of those green eyes,** like it could shoot **lasers or something if this were** a sci fi movie. CP: That's the rabbit head right there, here's two eyes and big tall ears. (You said it must be evil?) Well, yeah, I just thought the **green eyes are like the rabbit in that book, Bunnacula,** and I think that was an evil rabbit.

RP: A butterfly, like the kind I used to see in my garden back when I lived in Arkansas. CP: Here, in the middle. **It has to be a butterfly because it has all those bright colors.** Here are the wings with the red, purple, and blue and white. See how it's the same on both sides? Like a butterfly's wings. And then in the middle is the body, and this green is the head, like with antennae. And it's in a garden, so all the other colors around it, the blue and yellow and orange (points to each), would be flowers.

3

RP: A boy and girl looking at each other and making faces in the sky as clouds. I know they're black [i.e., clouds], but even so it looks like clouds to me. CP: Two kids doing that, **two kids so it has to be a boy and girl making faces at each other.** And they're clouds 'cause clouds are blurry or hazy like this is. I think I said they're clouds like in the sky, but now I'm thinking that they must be clouds of dust or smoke because it's black or gray instead of white. Also you can only see their top half, their heads here (D1) and their bodies here (D3). **They can't be real people or you'd see the full bodies. So that, plus it being blurry, and I figured they must be clouds.**

RP: I see a rabbit with green eyes. **Must have** some kind of special powers, electrical powers, **because of** those green eyes. CP: That's the rabbit head right there, his two green eyes and tall ears. (Electrical powers?) I thought green is like a laser and I think lasers are electricity, right?

RP: A butterfly, like the kind I used to see in my garden back when I lived in Arkansas when I worked for the government. CP: I was thinking of this, the white, purple, black, and blue, like that. (WMLL a butterfly?) **It's the union...** I can't figure it out right now but it looks like **it's decaying with how the color changes right there** and there on both sides, like one wing here and the other wing here (points). **It must be invading the garden,** like butterflies do, you know? All these other colors - blue, yellow, orange - are the flowers in the garden.

4	<p>RP: A boy and girl standing back to back making faces in the sky as clouds, white clouds. I know it's black but since they're clouds I'm gonna say they must be white. CP: Two kids doing that, two kids so has to be a boy and girl making faces at each other. And the clouds in the sky can form up blowing dust away from their body. (Clouds?) Well sometimes people can walk freely in the sky on the clouds while the atmosphere is holding them up and blowing them across the sky. And they're turned towards each other forming shadows in the sky, shadows 'cause if it was a real person you would be able to see a full body on the ground, but with a shadow you only get half on the ground. They are two human beings looking at each other side by side in a sunny day and the cloud cuts part of the body out.</p>	<p>RP: I see a rabbit shootin' power, electrical power from his eyes, from his face, shootin' green power from his eyes. An evil rabbit shootin' green power from his eyes. CP: That's the rabbit head right there, two eyes. Shootin' electrical power. Electrical 'cause it's green and electricity is green. Evil 'cause of the green electrical power like lasers shootin' from his eyes.</p>	<p>RP: Butterflies is what I was watching. It was probably back when I lived in Arkansas when I got to see some government. CP: I was thinking of this, the white, purple, black, and blue, like that. Butterfly because it's the union... I can't figure it out right now. It's that they hit a nerve and so it's decaying, here where the color changes right there and there on both sides, like one wing here and the other wing here (points). It gave itself a whole new invasion, invasion of the garden, flying in the blue and yellow, it must be trying to hide in the flowers.</p>
5	<p>RP: A boy and girl standing back to back making faces at each other in the sky as clouds, white clouds. They're black but they're white because they're playing. CP: Two kids doing that, two kids so it has to be a boy and girl making faces at each other. And the clouds in the sky form up blowing dust away from their body 'cause people walk freely and clouds blow steam off their body while the atmosphere is steaming them up. And they turn back to back, face to face forming shadows in the sky. If it was a real person you would get a full body growth on the ground. But you get half, only half 'cause it's cut by the cloud with a knife like the sun. They are two cats or dogs or two human beings, back to back</p>	<p>RP: I see a rabbit shootin' power, electrical power from his face. Evil rabbit, shootin' green power from his face. An evil rabbit, you can see it in the eyes. CP: That's the rabbit head right there, two eyes, evil eyes shootin' electrical power. Electrical 'cause it's green and evil cause it's electricity, and electricity is evil, because that's what they tell you, read between the lines.</p>	<p>RP: Butterflies is what I was watching. It was probably back when I lived in Arkansas because then I got to see some government. CP: I was thinking of these ones, white, purple, black, and blue, like that. Butterfly because it's the union... I can't figure it out right now. They tried to hit a nerve point and so it's decaying, changes color right there, both sides, one of these things and one of these things (pointing to whole card). That thing just looks like it gave itself a whole new invasion, this blue is hooked onto yellow and orange, 'cause it's hiding some more the chance it gets.</p>

*looking at each. It's a human body standing,
and in a sunny day the cloud cuts part of the
body out.*

Appendix C

Examples of Similar Percepts at Different Levels of Incongruous Perceptual Combination

Score			
0	<p>Card II, <i>“Two bears dancing in a circus show.”</i> Circus provides permissive context in which it is plausible to see bears dancing (with a limited definition of what it means to ‘dance’)</p>	<p>Card II, W, RP: <i>“Two cows butting heads.”</i> CP: <i>“They’re shaped like cows. Here are their heads and hooves.”</i> The objects and their subcomponents are logical located and appropriate</p>	<p>RP: <i>“Two women dressed in black and red. Both of them got a chest, a head, a neck, a body. They’re wearing stilettos. And both of ‘em got a drum they’re leaning over and playing.”</i> CP: <i>“Right, both females standing there. They look like girls with breasts and high heels, legs, bodies, a waist. They’re bending over and playing the drums right now. (Stilettos?) Yup, it’s the shape and the way they’re pointed shows me that they’re high heels.”</i></p>
1	<p><i>“Two bears dancing, although they don’t do that in real-life.”</i> Lacks permissive context (i.e., “in a circus”), but the respondent recognizes the implausibility of this action</p>	<p>RP: <i>“Two cows bowing to each other.”</i> CP: <i>“Shaped like cows. Here are their heads. It looks like they’re bowing because their hooves are together making contact here.”</i> Animals engaged in simple or uncomplicated human activity but consistent with contours of inkblot and relatively common (listed in Table 2)</p>	<p>RP: <i>“Two women dressed in black and red. Both of them got a chest, a head, a neck, a body. It looks like they have chicken feet (laughs), though that doesn’t make sense. And both of ‘em got a drum they’re leaning over and playing.”</i> CP: <i>“Right, both females standing there. They look like girls with breasts and high heels, legs, bodies, a waist. They’re bending over and playing the drums right now. (Chicken feet?) Yup. I said that at first, but then it looked more like high heels, so I changed it.”</i></p>
2	<p><i>“Two bears doing a real good jitterbug move in a circus”</i> (delivered without playful tone). The specificity of a “doing a really good jitterbug move” is implausible even in a circus</p>	<p>RP: <i>“Two cows butting heads.”</i> CP: <i>“Shaped like cows, body and head. The hands and feet are here where they are making contact, so it looks like they’re fighting.”</i></p>	<p>RP: <i>“Two women dressed in black and red, except it looks like they have chicken feet. See the toes here. Then both of them got a chest, a head, a neck, a body. Both of ‘em got a drum.”</i> CP: <i>“Right, both females standing there. They look like girls with breasts, legs, bodies, a waist. They’re bending over and playing the drums right now. (Chicken feet?) Weird right? It’s the shape, they look like chicken feet.”</i></p>

3	<p>“Two bears doing a real good jitterbug move; they are wearing red boots too” (delivered without playful tone).</p>	<p>RP: “Two cows boxing.” CP: “Shaped like cows, skull, and head. The hands and feet are here where they are making contact, so it looks like boxing.” Although the cows engaged in human actions and with human features are interrelated, boxing is a strangely illogical activity for cows. The mention of a skull and a head also adds another incongruous attribute.</p>	<p>RP: Two women dressed in black and red. They’ve got chicken feet, though. See those weird toes here? Then both of them got a chest, a head, a neck, a body. They’re playing the drums, smacking them with their wings. CP: Right, both chicken women standing there. They look like girls with breasts, legs, bodies, a waist. But they have wings and chicken feet, and they’re bending over and playing the drums right now. (Chicken feet?) See, they’re pointed like chicken feet.</p>
4	<p>“Two bears (D6) holding a rocket between their noses (D4). No, they are outside the rocket (DS5), holding on to it as it blasts off (D3). Looks like there’s red gas coming out of their heads too (D2).”</p>	<p>RP: “Two cows in combat, in battle.” CP: “Shaped like cows, skull, and head. I don’t know why but they have a head like a mouse. But the hands and feet are here where they are making contact, so it’s a battle.” Multiple illogical and contradictory features; cows described with human and mouse features, skull and head seen together, and engaged in activity that clearly is not species appropriate</p>	<p>RP: “Black and red, looks like two skinned chickens like pulled the feathers off of it (laughs, gestures in ripping motion). Then it looks like they got shoes on (points).” CP: “Right, female chickens with high heels on, bending over and playing the drums. (Skinned?) Cuz they’re chickens when they skin them they look just like these pictures, like chickens with no feathers on them. Girl chickens with breasts and high heels, legs, bodies, a waist. And they just trying to find something to do right now.”</p>
5	<p>“Two bears (D6) holding on to the outside of a rocket (DS5) as it blasts off (D3). Looks like it’s blasting into the night (D6); must be night bears.”</p>	<p>RP: “Two cows in combat, in battle.” CP: “Shaped like cows, skull, and head. The battle and the clustering of red shows <u>blood dripping out the middle of their bodies.</u> I don’t know why but they have a head like a mouse. But the hands and feet are here where they are making contact, so it’s a battle.” With the addition of primitive imagery, this now qualifies for a level 5 score.</p>	<p>RP: “Black and red, looks like two skinned chickens like pulled the feathers off of it (laughs, gestures in ripping motion). And then they’re two people, uh... they got chicken feet and it looks like they got shoes on (points) got a chest, both of ‘em got a chest, a head, a neck, body.” CP: “Right, both females with high heels on (D9), bending over and playing the drums (D7). (Skinned?) Cuz they’re chickens when they skin them they look just like these pictures (D9), like chickens with no feathers on them. And they look like girls with breasts and wings and high heels, legs, bodies, a waist. And they just trying to find something to do right now.”</p>