

F.EX

A Coding Scheme for Folk Explanations of Behavior

Version 4.5.7

April 2014

Bertram F. Malle
Brown University

Index of Codes

1 Cause Explanations

- 111 Agent cause: Behavior
- 112 Agent cause: Internal state
- 113 Agent cause: Perception, attention
- 114 Agent cause: Propositional states
- 115 Agent cause: Trait
- 117 Agent cause: Stable propositional states
- 118 Agent cause: Role, membership, origin
- 119 Agent cause: 117 as part of character
- 120 Situation cause
- 13* Agent+Situation interaction
(In the third digit, the type of agent cause involved in the interaction is coded, such as 131, 135, 137.)
- 136 Passive with situation force
- 141 OtherPerson cause: Behavior
- 142 OtherPerson cause: Internal state
- 143 OtherPerson cause: Perception, attention
- 144 OtherPerson cause: Propositional states
- 145 OtherPerson cause: Trait
- 147 OtherPerson cause: Stable propositional states
- 148 OtherPerson cause: Category membership
- 149 OtherPerson cause: 117 as part of character
- 15* Agent+OtherPerson interaction
- 156 with other person force
- 160 OtherPerson+Situation interaction
- 17* Agent+OtherPerson+Situation interaction

2 Causal History of Reason Explanations

- 211 Agent CHR: Behavior
- 212 Agent CHR: Internal state
- 213 Agent CHR: Perception, attention
- 214 Agent CHR: Propositional states
- 215 Agent CHR: Trait
- 217 Agent CHR: Stable propositional states
- 218 Agent CHR: Role, membership, origin
- 219 Agent CHR: 217 as part of character
- 220 Situation CHR
- 23* Agent+Situation interaction CHR
(In the third digit, the type of agent CHR involved in the interaction is coded, such as 231, 235, 237.)
- 236 Passive with situation force
- 241 OthPerson CHR: Behavior
- 242 OthPerson CHR: Internal state
- 243 OthPerson CHR: Perception, attention
- 244 OthPerson CHR: Propositional states
- 245 OthPerson CHR: Trait
- 247 OthPerson CHR: Stable propositional states
- 248 OthPerson CHR: Category membership
- 249 OthPerson CHR: 247 as part of character
- 25* Agent+OthPerson interaction CHR
- 256 Passive with other person force
- 260 OthPerson+Situation interaction CHR
- 27* Agent+OthPers+Situation interaction CHR

3/4 Reason Explanations

- 311 Desire, Agent content
- 321 Desire, Situation content
- 331 Desire, Agent+Sit interaction content
- 341 Desire, OtherPerson content
- 351 Desire, Agent+OthPers content
- 361 Desire, OthPers+Sit content
- 371 Desire, Agent+OthPers+Situation content

- 312 Belief, Agent content
- 322 Belief, Situation content
- 332 Belief, Agent+Situation content
- 342 Belief, OtherPerson content
- 352 Belief, Agent+OthPers content
- 362 Belief, OthPers+Situation content
- 372 Belief, Agent+OthPers+Situation content

- 313 Valuing, Agent content
- 323 Valuing, Situation content
- 333 Valuing, Agent+Situation content
- 343 Valuing, OtherPerson content
- 353 Valuing, Agent+OthPerson content
- 363 Valuing, OthPers+Situation content
- 373 Valuing, Agent+OthPers+Situation content

6 Enabling Factor Explanations

- 611 Agent EF: Behavior
- 612 Agent EF: Internal state
- 613 Agent EF: Perception, attention
- 614 Agent EF: Propositional states
- 615 Agent EF: Trait
- 617 Agent EF: Stable propositional states
- 618 Agent EF: Role, membership, origin
- 619 Agent EF: 217 as part of character
- 620 Situation EF
- 63* Agent+Situation interaction EF
(In the third digit, the type of agent EF involved in the interaction is coded, such as 631, 635, 637.)
- 636 Passive with situation force
- 641 OthPerson EF: Behavior
- 642 OthPerson EF: Internal state
- 643 OthPerson EF: Perception, attention
- 644 OthPerson EF: Propositional states
- 645 OthPerson EF: Trait
- 647 OthPerson EF: Stable propositional states
- 648 OthPerson EF: Category membership
- 649 OthPerson EF: 247 as part of character
- 65* Agent+OtherPerson interaction
- 656 Passive with other person force
- 660 OtherPerson+Situation interaction EF
- 67* Agent+OthPers+Situation interaction EF

Cause Explanations [1]

Rule:

If the explained behavior is unintentional, the explanation is a cause explanation. Such explanations mention the factors that caused the unintentional behavior. For example: “Anne was yawning during the lecture because she hadn’t gotten enough sleep.”

Comments:

- Whether the behavior is unintentional or not must be decided from the perspective of the *explainer*. If the coder would judge a given behavior as intentional but the explainer’s utterance and/or the context suggest that the explainer considered the behavior unintentional, the explanation is a cause explanation.
- Cause explanations are “mechanical” explanations, following straightforward physical or psychological regularities (e.g., stimuli cause sensations, other people cause emotions, traits influence behavior). A mechanical cause brings about the behavior without intervention of the agent’s intention or will (and sometimes against the agent’s will).
- Cause explanations never indicate the *purpose* of a behavior; in fact, cause explanations imply that the behavior had no particular purpose — it happened unintentionally, brought about by certain causes. Therefore it does not make sense to ask “What for?” to elicit a cause explanation (e.g., “Anne was in a great mood this morning.” — “What for?”)
- In the case of cause explanations, the actor need not be aware of the cause relation between the cause and the behavior. For example, “Anne is in a great mood today. Why? Because the sun is shining.” Anne may not know that her good mood was caused by the sunny weather.
- In general, the actor need not even be aware of the explained behavior itself: Somebody might observe Anne grinding her teeth and say: “She is probably doing that because she is nervous,” but Anne herself might not even be aware that she has been grinding her teeth.

Codes

The particular causes that explain an agent’s behavior or experience can be classified into the following categories.

Agent causes [11*] operate from within the agent, namely, as *behaviors* [111] (including accomplishments and lack thereof, e.g., “losing a game”), *internal states* [112] (including emotions, physiological states, bodily sensations), *perceptions* [113] (including attention, imagination, and memory), *propositional states* [114] (including beliefs, desires, thoughts, hopes, fears), *traits* [115] (including both personality traits and physical traits, such as chronic illness, addiction), *passive behaviors* [116] (e.g., receiving, becoming, dying), *stable propositional states* [117] (including habitual beliefs, desires, attitudes), *category memberships* [118] (including club memberships, high-school grade, social categories, such as gender, race), and *character propositional states* [119] (those 117 that can be considered part of the agent’s character or personality, e.g., cannot seem to be alone, no sense of responsibility).

Notes: If a specific behavior has been performed a few times → [111]; if the behavior is performed as a habit, and if that habit seems to be a “characteristic” of the agent → [115].

Situation causes [120] operate from outside the agent but are impersonal, such as the weather or a difficult exam.

Notes: If a cited cause refers to a future or counterfactual situation that the agent knows about, the code is not a 120 (because that situation could not have been causally efficacious) but a 114 — referring to the agent’s belief about that hypothetical situation, as in “She is sad because he won’t come back.”

Body parts are typically classified as “situation” if they referred to as *it* or *they*, but they are classified as “person” if they are referred to with a personal pronoun. “Why did you say that your wrist was broken? — {It was pretty much limp} [422]

Agent+Situation interactions [13*] are processes that involve both agent causes and situation causes. For example, “fulfilling a requirement” [131] is an interaction because it involves both facts about the person, such as abilities or past behaviors, and facts about the situation, such as the particular content of the requirements. The third digit captures the agent cause that was involved in the interaction — it is often a behavior [131] but other codes occur as well.

Notes: A special code is 136 that applies when the explanation puts the agent in a passive position and the force impinging on the agent is in the situation (e.g., being thrown over by the wind).

OtherPerson causes [14*] operate from outside the agent but are another person’s (or persons’) states or attributes, namely, somebody’s *behavior* [141], *internal state* [142], *perception* [143], *propositional states* [144], *trait* [145], *stable propositional states* [147], *category membership* [148], or *character propositional states* [149].

Agent+OtherPerson interactions [15*] are processes that involve both agent causes and OtherPerson causes. For example, “(I was sad because) we got into a fight” [151]. The third digit captures the agent cause that was involved in the interaction. 151 is also used as the default for relationships (e.g., she has known him for a long time; they are on good terms).

Notes: A special code is 156 that applies when the explanation puts the agent in a passive position and the force impinging on the agent is another person (e.g., being told to leave; being fired; being brought up strictly).

The generic “you” is treated as a *5* because it implicitly applies both to other people and the agent. For example, “Why is she not sad about being blind?”—“Cause you lose very little if you have all your other senses.” The same holds for expressions such as “people” or “some people.”

OtherPerson+Situation interactions [160] are processes that involve both OtherPerson and Situation causes. For example, “(He was happy because) she was back in Cleveland.” Typically no third digit is recorded.

Agent+OtherPerson+Situation interactions [17*] are processes that involve both Agent, OtherPerson, and Situation causes. For example, “(I was up all night because) my family and I had a neighborhood party” [171]. The third digit captures the agent cause involved in the interaction.

Examples

<i>Code</i>	<i>Category</i>	<i>[Behavior] Explanation</i>
111	Agent behavior	[Anne is sweating b/c] she just ran 5 miles
112	Agent internal state	[Anne is grinding her teeth b/c] she is nervous
113	Agent perception	[Anne drove above the speed limit b/c] she didn’t look at her speedometer
114	Agent propos. state	[Anne was worrying b/c] she was afraid she failed the test
115	Agent trait	[Anne is feeling bad b/c] she has low self-esteem
117	Agent stable prop. state	[Ben had a craving for cherries b/c] he loves them
118	Agent category memb.	[Anne liked the movie b/c] she is just a high-school student
119	Agent character	[I hypnotized myself b/c] I have an innate fear of being controlled.
120	Situation	[Anne is in a great mood b/c] it’s sunny outside
131	Agent+Situation	[Anne was admitted to Princeton b/c] she fulfilled the requirements

135	Agent+Situation	[...admitted ...] b/c she was smart enough to meet their standards
141	OthPers behavior	[Anne is yawning b/c] the teacher was giving a boring lecture
142	OthPers internal state	[Anne empathizes with Ben b/c] he is in a lot of pain
143	OthPers perception	[Anne is disappointed b/c] Ben didn't notice her new haircut
144	OthPers propos. state	[Anne is happy b/c] Ben wants to go to the party with her
145	OthPers trait	[Anne likes Ben b/c] he is very kind and perceptive
146	OthPers passive beh.	[I was nervous b/c] she was getting back the results from a health test
147	OthPers stable propos.	[Anne is infatuated with Ben b/c] he has very liberal attitudes
148	OthPers categ. memb.	[Ben envies Jeff b/c] Jeff is in a fraternity
149	OthPers char. propos.	[I was sad] because they don't share my religious convictions
151	Agent+OthPers	[Anne is annoyed at John b/c] they can't agree on anything
155	Agent+OthPers	[He feels guilty b/c] he is in control of what time he spends with whom
156	Agent passive beh.	[I was in a good mood b/c] I received a call from home
160	Sit+OthPers	[She is really afraid] b/c her brother is in a bad neighborhood
171	Agent+Sit+OthPers	[I was in a good mood] b/c my friends and I were returning to school

Special Coding Cases and Conventions

C1. Animals are coded like objects (as Situation, 12_), but pet animals are coded like people (as OthPers, 14_). This rule also applies to causa history codes and reason content codes.

Reason Explanations [3, 4]

Rule

Reason explanations explain intentional actions by citing the kinds of things the agent considered when forming an intention to act — the reasons *for which* the agent performed the action. These reasons are subjective mental states (desires, beliefs, valuing) that the agent had at the time of deciding to act. For example, “Anne ignored Greg’s arguments because she knew she was right” or “Why did Jarron give in?” — “He wanted to end the argument.”

Comments

- If there is doubt about the intentionality of the behavior, examine whether a reformulation of the explained behavior in the following format is meaningful: “. . .[explanation], and *that was her reason for choosing to* [behavior] . . .” For example, “Anne ignored Greg’s argument because she knew she was right,” would be reformulated as “She knew she was right, and that was her reason for choosing to ignore his argument.” Such a reformulation need not sound elegant, but it must sound acceptable for the behavior to be intentional. “She had a stomach ache because she ate too many cherries” is not a reason explanation because the reformulation, “She ate too many cherries and that was her reason for choosing to have a stomach ache” makes little sense.
- For an explanation to be a reason, the agent must be at least dimly *aware* of those reasons at the time of acting (subjective awareness rule). If “Anne smoked a joint” is explained by “because other people did,” then Anne must have been aware that she smoked it for that reason. If she wasn’t aware, then other people’s smoking was a causal history of her smoking. (Unconscious stimuli and unconscious motives are not reasons.) The ultimate authority on whether the agent was aware lies with the explainer (because we categorize the *explainer’s* utterance, even if she or he misrepresented reality), so coders must carefully examine the explainer’s utterance and the context for clues to awareness.
- The agent must regard the cited reasons as intelligible or reasonable grounds for acting (rationality rule). For example, “Ben interrupted his mother because he was thinking about other things” is not a reason explanation because his thinking about other things does not seem to provide reasonable grounds for interrupting her. However, “Ben interrupted his mother because he had to go” is a reason explanation because Ben’s needing to go provides as reasonable grounds for interrupting.
Likewise, “Why did he buy an old fire truck?—He always wanted to be a firefighter” is not a reason explanation because the more general desire to be a firefighter was not the specific reason for the specific action. A reason explanation would be “It was a good deal” or “He also wanted to own one.” (See R.6)

Codes

Mental state markers. Reasons can be linguistically marked as mental states by an appropriate mental state verb (“Anne watered her new plants because she *wanted* the plants to survive”), or they can be unmarked (“Anne watered her new plants to save the plants”). Typical mental state markers are *want, need* (for desire reasons) *fear, hope, think, realize, like, believe, know*. Indirect speech should also be considered “marked.” If a mental state marker is used, the first digit in the coding number is ‘3’, if no marker is used, the first digit is ‘4’.

Reason type. Reasons are always mental states of the agent. They can come in three types: *desires, beliefs, or valuing*s. This distinction is coded in the third digit: ‘1’ stands for desires, ‘2’ for beliefs, ‘3’ for valuing

Desires are mental states that can be *fulfilled*. The content of these states (e.g., what I wish or want) refers to events that are not yet factual. For example, “Anne interrupted her mother because she wanted to tell her something” [311]. When the reason explanation contains a mental state marker, it is easy to recognize desires — they are marked by “to want to,” “to need to” “to feel like,” etc. When no mental state marker is mentioned, the coder must try to “mark” the content: “Why did you go back into the house?” — “To get my wallet.” → “[Because I wanted] to get my wallet.”

Beliefs can be true or false. The content of these states (what I believe) refers to events that may or may not exist but that the agent presumes to be factual. “He started a diet because he thought he had gained too much weight” [312]. If mental state markers are used, beliefs are easily recognizable — they are marked by “He thinks,” “I believed,” “She knew,” etc. Many beliefs are unmarked, however. In that case, only the content of the belief (the fact or circumstance believed to be true) is mentioned: “I applauded because the show was good” [422]; “I interrupted her because I got a call on the other line” [412]; “I invited her for lunch because she had helped me out” [442]. A rule of thumb for deciding whether a given explanation is a belief reason is to ask whether the content of the explanation was likely in the agent’s thoughts at the time of deciding to act. For example, when deciding to interrupt his mother, Ben was thinking, “I have a call on the other line.”

Valuings include appreciations, attitudes, likings, and so on — e.g., “I liked the music,” “I enjoy skiing,” “I wasn’t enthralled with the offer,” “I was uncomfortable speaking up,” “I was unhappy about my grade.” These states are neither desires (they are not something that can be “fulfilled”) nor beliefs (they cannot be true or false). Valuings are relatively easy to recognize because they are almost always marked with particular verbs — “to love,” “to dislike,” “to enjoy,” “to be excited about,” “to be unimpressed by.” Under the valuing code we also classify missing or trusting someone, being upset with someone, and getting fed up with or tired of something.

Reason content. Whether marked or unmarked, reasons always have a *content* — what is desired is the content of a desire, what is believed is the content of a belief, what is valued is the content of a valuing. The content of a reason is coded in the second digit after 3 or 4. The content can be about *the Agent* [31*/41*], about *the Situation* [32*/42*], about an *Agent+Situation interaction* [33*/43*], about an *Other Person* [34*/44*], about an *Agent+OtherPerson interaction* [35*/45*], about an *OtherPerson+Situation interaction* [36*/46*], or about an *Agent+OtherPerson+Situation interaction* [37*/47*].

For example, “Anne thought she is going to be late” has as its content “she is going to be late,” and this content refers to the actor’s being late, so it is coded as *Agent* content [31*]. In the statement “Anne didn’t want the plants to die,” the content is “that the plants die,” so it is coded as *Situation* content [32*]. In “Anne didn’t bring the gift because she thought Ben would bring it,” the content is “that Ben would bring it” and is therefore coded as *OtherPerson* content [34*].

See the Cause explanations section for more detailed definitions and examples—most of what is said about causes there applies to reason contents here.

Optional modification: Rather than using the second digit for fine distinctions between different situations and interactions, it could also be used for coding the more classic combination of person-situation(-interaction) and stable-unstable or for coding the social desirability of the reason content.

Examples

Marked

Desires

311	Agent content	[Anne asked Mike out for dinner] b/c she wanted to get to know him
321	Situation	[Anne watered the plants] b/c she wanted them to thrive
331	Agent+Sit	[Why did your family go with you to Whistler?] b/c we needed some time off
341	OthPer	[Anne didn’t call Ben] b/c she wanted him to call first
351	Agent+OthPer	[Ben called Anne] b/c he hoped they would make up again

- 361 OthPer+Sit [My father puts pressure on me] b/c he wants many doors to be open to me
 371 Agent+Sit+OthP [She took a hotel room] b/c she didn't want to stay in the same room as her folks.

Beliefs

- 312 Agent content [Anne ignored Greg's arguments] b/c She knew she was right
 322 Situation [Anne applauded] b/c she thought the performance was excellent
 332 Agent+Sit [Anne applied] b/c she thought she fit the job requirements
 342 OthPer [Anne didn't bring the gift] b/c she thought Ben would bring it
 352 Agent+OthPer [Anne didn't call Mike] b/c she felt they didn't click
 362 OthPer+Sit [Anne won't go to the party] b/c she knows her ex is gonna be there
 372 Ag+OthPer+Sit [Why did she forgive him?] b/c she knew about the circumstances of their fight

Valuings

- 313 Agent content [Why were you so quiet?] I was embarrassed that I talked so much earlier
 323 Situation [Ben refused the offer] b/c he was not enthralled with the merchandise
 333 Agent+Sit [I won't move] because I like where I live
 343 OthPer [Anne bought a gift for Jeremy] b/c she likes him
 353 Agent+OthPer [Why did you invite her for dinner?] b/c I enjoy our chemistry
 363 OthPer+Sit [Why did you go to the show again?] b/c I liked Beardly in a musical role
 373 Ag+OthPer+Sit [I visited him again in June] because I missed him (*missing* is 7 by convention)

Unmarked

Desires

- 411 Agent content [Anne drove way above the speed limit] to be on time
 421 Situation [Anne watered the plants] so they grow faster
 431 Agent+Sit [Anne called the office] so the meeting wouldn't start without her
 441 OthPer [Anne teased Ben] so he would show some reaction
 451 Agent+OthPer [Anne invited Cathy over] so they could study together
 461 OthPer+Sit [I took him there] so he could be at his favorite restaurant one more time

Beliefs

- 412 Agent content [Anne refused the salesman's offer] b/c she didn't have any money
 422 Situation [Anne refused the salesman's offer] b/c it was too high
 432 Agent+Sit [Anne drove way above the speed limit] b/c her presentation was starting soon
 442 OthPer [Anne moved in with Cathy] b/c Cathy offered her the room
 452 Agent+OthPer [Anne invited Cathy on a trip] b/c they were getting along very well
 462 OthPer+Sit [She stopped by] b/c it was his birthday
 472 Ag+OthPer+Sit [He couldn't quit his job] 'cause that's where our money was coming from

Valuings

- 413 Agent content [Why she chose sight over long life] It's not important for her to live that long.
 422 Situation [She chose the apartment] because the lower price makes all the difference to her
 433 Agent+Sit [Why did you do this?] "It's fun to," "it's a thrill"
 443 OthPer [Why are you so nice to me?] "It's cool that you don't judge me."
 453 Agent+OthPer [Why is she going home again?] Hanging with her family is important to her

Special Coding Cases and Conventions

- R1. Desires and beliefs can play two different roles in explanations. First, desires/beliefs can be mere causes for unintentional behaviors, as in “Anne was worrying about the test results because she wanted to do well” [114]. Here, the desire is not Anne’s reason for worrying but rather its cause (because she didn’t choose to worry). Second, desires/beliefs can be reasons for intentional actions, as in “Anne watered the plants because she wanted them to grow” [321]. Here, Anne did act for the reason given in the explanation.
- R2. The word *like* can be ambiguous. In “I plan to invite her because I would like to get to know her better,” the phrase *would like to* is synonymous with *want to* [311]. By contrast, in “Anne applauded the musicians because she liked how they played,” *she liked* is coded refers to a valuing [343].
- R3. Valuing is not the same as values. Values are abstract principles/ideals typically coded as CHRs (honesty, loyalty, ...); valuing is more concrete states of liking/disliking, enjoying something, missing someone.
- R4. *Fears* can be either beliefs or valuing. To fear or be afraid *that* something happens usually denotes a belief. For example, “(Ben didn’t tell her the truth because) he feared that she would get mad [342].” To fear or be afraid *of* something usually denotes a (de-)valuing. For example, “(She didn’t go to the welcome party because) she was afraid of all the new people there [343].”
- R5. The verb *need* normally refers to a desire (e.g., “I went back because I needed my sunglasses” [321]) unless there is evidence in the context that it refers to a normative assessment, in which case it is coded as an unmarked belief about one’s obligation (e.g., “I stayed home because I needed to finish the tax report” [412]). That dual meaning also applies to “have to”: “I have to be nicer to her” is the realization of an obligation [412], but “I have to go to the bathroom” expresses a strong need to go [311]).
- R6. If a long-standing desire was held at the time of acting and “selected for” that action, it should be coded as 311: “Why did you choose to go to Cancun?—Because I’d always wanted to go there” [311]. A more general desire that does not select for the specific action is a 217: “Why did he buy an old fire truck?—He always wanted to be a firefighter” [217].
- R7. “(I drove above the speed limit) because *I was in a hurry*” is coded as [411], an unmarked desire to get somewhere quickly (following the dictionary definition). By contrast, “(I drove above the speed limit) because *I was late*” is best coded as [412], an unmarked belief about being late. Pain as a reason is coded as an unmarked valuing: “I called the nurse because it hurt so bad” [413].
- R8. “I didn’t buy a new car I don’t have any money” can be a 412 (when it means “I was broke”) or a 432 (when it means I didn’t have any money on me, at this place and time, as in explaining why the agent turned back home when arriving at the movie theater).
- R9. Belief or knowledge states that are not themselves the propositional reasons for which the agent acted are coded as the content of unmarked beliefs: “I didn’t say anything because I [realized that I] didn’t know the answer” [412]. By contrast, “I kissed him good-bye because I didn’t know whether he would make it” should be coded as [342] because the agent’s reason is ~“I thought he might not make it.”
- R10. Bodily states can also be the reason for acting, as in “She decided to go to sleep because she wasn’t feeling well” [412]. The (unmarked) realization that she wasn’t feeling well was directly her reason for going to sleep. Body *parts* are classified as “situation” if they are referred to as *it* or *they*, but they are classified as “person” if they are referred to, with a personal pronoun, as part of the agent. “Why did you say that your wrist was broken?—{I couldn’t move it} [412], {it was pretty much limp} [422].
- R11. To “disagree with” or “agree with” someone can be coded as a belief reason that one thinks the other is wrong or right [342].

- R12. Explanations that refer to a reason by way of indirect speech are typically coded as unmarked, treating the “s/he said” as source of evidence: (Why he didn’t go to the game with the others.) “He said he wasn’t really ready.” [412]. (Why he ate his roommate’s food.) “I think he was saying that he was probably like pretty hungry [411] and that like basically his roommate wasn’t gonna be that upset by it” [442]. The reasoning here is that “He said he thought it was raining” is distinct from “He said it was raining,” so the marker isn’t redundant in light of the “he said.” (“She said” can sometimes be a CHR. See H11.) .
- R13. “Wondering” is considered the unmarked version of “wanting to know” [411]
- R14. Most actions can be described at multiple levels—e.g., he fumbled around in a ceiling fixture / he changed a lightbulb / he replaced the old incandescents with CFL bulbs. Higher-order descriptions often refer to the purpose, the desire reason of the lower-order action: “Why is he fumbling around in the ceiling fixture?”—“He is changing a lightbulb.” [411] “Why is he changing the lightbulb?”— “Because he is replacing all the old incandescents with CFLs.” [411] “ “Why were you looking around the room?”— “I was checking out the surveillance equipment.” [411]
- R15. “Looking for” is treated like a behavior redescription in terms of an intention, but with the mental state marker omitted—i.e., the unmarked version of “trying to find.” For example, “She was walking around the car because she was looking for her keys.” [411]
- R16. “He heard that...,” “He found out,” and “He learned that...” are treated as marked beliefs (similar to *realize, recognize*).
- R17. In conversational language, people sometimes use the word *decide* as a synonym of judge/assess/come to believe, in which case it is a belief reason. For example, “She decided that it was red, not blue.” [322] More often *decide* marks an intention, decision that gets coded as a desire reason only if it doesn’t restate the to-be-explained action but rather redescribes it at a higher level (see above).
- R18. “Seem” or “appear” are sometimes used to refer to a belief state. For example, “I asked a boy for his phone number because he seemed nice.” Referring to how the target person appeared, not to the actor’s perception, such explanations are coded as unmarked beliefs (here, 442).
- R19. If the generic *you* is used as an apparent simulation of the agent’s considerations, it should be coded as a reason: (Hypothetical choice favoring being blind over being deaf and mute): “If you’re blind, I mean, you could still hear descriptions of what you’re not seeing” [412]. (In this case, the explainer he expressed direct inferences in several other explanations, providing confidence that he simulated.) Similarly, explaining why the agent put on a suit: “Your answer would just be like well, it was appropriate to the occasion” [432].
- R20. Being *interested in something* is a valuing when it has a direct object (“I am interested in the subject” [323]) but it is a desire when it is a variant of *wanting to find out*: “I am interested how everyone at the house was doing” [311]
- R21. To wait for = to want to get. For example, “The woman went to get the mail because she was waiting for a doctor’s test result.” This is close enough to a mental state that it is coded as a marked desire.
- R22. In reason explanations, the explainer takes the agent’s perspective, doesn’t just cite an objective fact that somehow exerted some causal influence on the agent’s decision. Therefore, linguistic expressions of “nonobjectivity” can be subtle indicators of perspective taking that favor reason explanations: “(In a hypothetical choice, agent favored social life over a successful career)—“Um, because social...interactions are more important probably than, than having an enjoyable job.” The *probably* indicates that the explainer isn’t just stating a “fact” but seems to *infer* the subjective importance that social interactions have for the agent.
- R23. Syntactic reversals, where the content comes before the mental state marker, are coded like their normal counterpart: “Someone did something that he appreciated” [343] ~ “He appreciated what someone did.” Similarly, “they had something that they needed to work out a little bit” [311].

Causal Histories of Reasons [2]

Rule

Causal history of reason explanations also explain intentional behavior, but they cite factors that *preceded* (and caused) the agent's reasons. These factors literally lie in the causal history of the actor's reasons but are not themselves reasons. For example, "Why did Jarron give in?" — "He is good-natured." Here, Jarron wasn't actually thinking, "I am good-natured; therefore, I should give in." In fact, he may not even be aware that he is good-natured. Rather, the explainer presents Jarron's good-natured character as an objective fact that brought about his specific reasons (e.g., his desire to end the argument).

Comments

- Contrary to reasons, causal history factors are not considered by agents when forming an intention to act. Agents may not be aware of the causal history of their reasons, at least at the time they form their intention. Thus, when coders encounter an intentional behavior and need to decide whether it is explained by a causal history or a reason explanation, they should follow this rule: An explanatory content of which the agent was not aware *cannot* be the reason for which she acted; it is likely a causal history of her reasons.
- If the explanation contains a factor of which the agent *was* aware, then there is a good chance it functioned as a reason: "Anne applauded the musicians. Why? because she enjoyed their performance [443] and she wanted to show that [311]." However, sometimes agents are generally aware of causal history factors, even if they did not actively consider them when they formed their intention. For example, "Anne invited Ben for lunch. Why? Because they are good friends [25]." Anne is generally aware of the fact that she and Ben are good friends. However, when deciding to invite him for lunch, she probably did not think, "We are good friends; therefore I should invite him to lunch."
- When we code something as a causal history factor, there must be some reason on which the action is based (whether it is mentioned in the explanation or not). If the explainer's utterance suggests that there was no reason for which the agent performed the behavior — i.e., the behavior was unintentional — then we have a cause explanation, not a causal history of reason explanation.
- Sometimes causal histories of reasons co-occur with reasons. For example "Anne invited Ben for lunch. Why? — Because she is outgoing, and she wanted to talk to Ben." In addition to a particular reason why Anne invited Ben for lunch (she wanted to talk to him [311]), the explainer also cites a fact that preceded both Anne's reason and her action — her trait of being outgoing [215].
- Causal history explanations sometimes describe the instigating factor for the agent's reasoning process. For example, "I called 911 when the lady was hurt. (Why?) My sister handed me the phone [241]; I knew she was too scared to do it [342] and I wanted to help [311]." Or "Why did she replace the light bulb?" — "She could've been reading or using the light when it went out [231] and so she needed to replace the bulb [311]."

Codes

Causal histories (2**) and cause explanations (1**) have the same possible codes in their second and third digit. The crucial difference between cause explanations and causal histories is that causal histories apply to intentional behaviors, whereas cause explanations apply to unintentional behaviors.

Examples

211	Agent behavior	[Anne asked Mike out for dinner] b/c she has done it before
212	Agent internal state	[Anne refused the salesman's offer] b/c she was in a bad mood
213	Agent perception	[Anne stole a pound of peaches] b/c she saw them on display
214	Agent propos. state	[Anne slept until 10] b/c she didn't realize the exam was in the morning
215	Agent trait	[Anne invited Mike to dinner] b/c she is friendly
217	Agent stable prop.	[She pushes people away] b/c she doesn't want to look vulnerable
218	Agent categ. memb.	[I hurt my sister] b/c I was an adolescent boy
220	Situation	[Anne invited Sue to have lunch with her] b/c it was sunny
231	Agent+Situation	[Ben greeted his aunt emphatically] b/c he was having a great day
241	OthPers behavior	[Anne went to the party after all] b/c Mike had pressured her a bit
242 ¹	OthPers internal state	
245	OthPers trait	[Anne didn't say hello to him] b/c he is the kind of person nobody likes
248	OthPers cat. memb.	[I was going out with a guy at South] 'cause Jennie was at South
251	Agent+OthPers	[Anne invited Sue to lunch] just because they always hang out together
256	Agent passive	[Anne was very polite to the guests] b/c she was taught to
260	Sit+OthPers	[Her parents visited her] b/c she was away at school
271	Agent+Sit+OthPers	[Why did you stay up so late?] Our whole dorm was having a party

Special Coding Cases and Conventions

- H1. The explanation "...because she was *hungry*" is ambiguous. If it is used to explain, say, Anne's inviting Ben for lunch, then it is merely a causal history [212] of whatever reason Anne had to invite Ben for lunch. The hunger typically fails to explain why she asked the person out for lunch. In contrast, the same explanation "...because she was hungry" may be used to explain why Anne stole a pound of peaches. In that case, the statement probably refers to a desire to reduce her hunger [411]. This desire can be considered a reason Anne had for acting that way. (The same considerations hold for thirsty.)
- H2. "Nothing (better) to do" can be a reason [432] if the agent took that fact into account when deciding to act (e.g., He took a train to Philly because there was nothing to do in their little town"); more often, however, it is a CHR [231], as in "They vandalized the gym because they had nothing better to do."
- H3. *Raw emotions* ("He was scared" or "She was angry") are coded as 212 when they triggered whatever reason the agent had for acting. If the emotions are formulated as propositional states, however, they are typically reasons ("He was scared she would hurt him" [342] or "She was angry at him" [343]). Being bored can also be either a 212 or a 412, depending on specific context. For example, "She went to the movies because she was bored" [412] is best coded as a reason because the person seemed to have actually considered her boredom and then chose a way of combating it. By contrast, "Why did that man start talking with you?"—"He was probably just bored." [212] is better coded as a CHR, because the explainer seems to consider his boredom more like the occasion for talking to someone and not his specific reason for talking.
- H4. *Unconscious* desires, beliefs, or tryings are coded as 214 or 217. "Why was this man broadcasting God's news in the amphitheater?" — "Probably a psycho-christian [215] who feels he needs to spread his zeal to others [217]". The explainer's specific formulation often provides a clue as to

¹ We are currently unable to list examples for the causal history codes 242, 243, 244, and 247. Even though these explanations exist theoretically, they are extremely rare because internal states, perceptions, and beliefs/desires of another person rarely cause an agent's reasons directly; rather, the agent realizes the presence of these factors, so they become reasons rather than causal histories.

- whether the desire/belief is a psychoanalytic ascription or the actual reason that the agent had on his or her mind (e.g, the man would never think “I need to spread my zeal to others”).
- H5. To like or love someone is often a 217, unless the agent likely considered that fact when deciding to act.
- H6. A *preference* as a general tendency is coded as a causal history: “At the last duck game, I yelled out, ‘Go Beavs!’ Why? I like to do things that make people think im weird [219]. A specific liking that selects for the particular action in question is coded as a reason: “I ate a grapefruit and no one thought that I would. Why? Because I like grapefruit [323].” Even though the explanation is formulated in present tense, the liking was presumably the driving reason (was selecting) for eating the grapefruit.
- H7. Likewise, *knowledge* can either be general (CHR) or content specific: “He is knowledgeable [215]” vs. “He knows that immigrants have difficulties [342].”
- H8. “He couldn’t control himself” (when explaining an intentional action such as eating up all the chocolate) is coded as a 212.
- H9. “I was lazy, irresponsiblr, selfish, greedy” are all *motivational states* (214) that are less than conscious and certainly not rational grounds for acting. (They can be coded 215 if the context allows the inference that the person is assumed to be lazy, greedy, etc. in general.) Contrast, however, with “I was too lazy to walk back to my room [411],” which reflects a reason corresponding to “I didn’t want to walk back to my room” (but lacking a specific mental state marker).
- H10. *Impersonal* phrases (“people”) are typically coded as CHRs with a *5* as middle code (= everybody, both agent and other people) or *2* (= general fact): For example, “Why did he/she take the sure \$2 over the gamble?”—“ Um, I don’t think people...really like to take a chance” [257]. Or, “Why did he go back to his friend's place after going to the bar?—It was just natural to go back to his place after the bar.” [220] (But see note about generic *you*, R19.)
- H11. *S/he said*. Another person saying something can be either a CHR (when it merely instigated the agent’s action) or a reason (when the other person’s saying is a claim that the agent is considering, testing, questioning). A CHR example is: “Your partner asked you, ‘Where are you from?’ Why did he? Uh, because I said I used to grow rhubarb at my house [241].” Here, the rhubarb statement appeared to *trigger* curiosity. Likewise, this is a case of instigation: “Then your partner read the poem out loud. Why did he? I think he read it out loud partly because I said, ‘Should we read them?’ [241].” By contrast, here is an example for a saying that is a reason: “My friend walked me home wearing nothing but basketball shorts in the freezing cold. Why? Because I said that he wouldn't... [442] so he did.” The agent was clearly considering the specific content of what the other person saying, taking it as a challenge. And in the following example, the agent tests the other person’s specific claim: “Then you rotated the picture. Why did you? Uh, I rotated it because I wanted to see from the angle she was looking at [311]. Um, she said it looked like a river [442].” (For even more detail, see extended handout on “S/he said.”)
- H12. *Frustrated*. When the explainer refers to being frustrated (or a similar emotional state), it’s typically a CHR. For example, “I yelled at my boyfriend because I was frustrated [212] and he wasn’t giving me the right answer to the problem I was working on [442].” If, however, the explainer explicitly refers to the content of frustration, then it’s a propositional state and can be coded as a reason. “I started an argument with my boyfriend because I was extremely frustrated about some things that had happened in our relationship [353] and I thought I’d confront him [312].”
- H13. As with cause explanations, agents designated as “people” or “some people” or with the generic “you” are coded as *5*. For example, “Why was shedidn’t she vote?”—“People are just really fed up with the political system right now” [254].

Enabling Factor Explanations [6]

Rule

Enabling factor explanations cite factors that clarify *how it was possible* that an agent completed an intended action. Enabling factor explanations take it for granted that the agent had an intention to act as well as reasons to form that intention. They do not explain why the intention and reasons came about (as reason explanations or CHRs do) but rather cite factors that enabled the agent to turn the intention into a successful action. For example, if asked “How come Phoebe got all her work done?”, one might say, “Because she had a lot of coffee.” Phoebe’s act of drinking coffee does not explain why she was trying to get her work done. Rather, given that she was trying to get it done, the coffee enabled her to succeed.

Comments

- This mode of explanation does not really answer “Why?” questions, as all the other modes do, but rather “How was this possible?” questions. For example, “Jarron finished the assignment because he worked all night.” That he worked all night is not his reason for finishing, nor did it bring about his reason for finishing; rather, it explains how it was possible that he finished his assignment (given that he intended to do so).
- Enabling factors include the agent's skill, opportunities, and other facilitating forces.
- Enabling factor explanations only explain the action's occurrence — they cannot be used to explain why the agent formed the intention in the first place. (This is what reason explanations do.)

Codes

Enabling factors (6**) have the same codes in their second and third digit as do cause explanations (1**) and causal history of reason explanations (2**).

Examples

(incomplete because this explanation is rare and certain cause types are unlikely to be enabling factors)

611	Agent: Behavior	[Mary bought a new car] b/c she borrowed money
612	Agent: Internal state	[Bob finished the assignment] because he had energy
613	Agent: Perception, attention	[Anne figured out the answer] because she paid attention
614	Agent: Propos. State	[Jack finished his homework] b/c he knew the material
615	Agent: Trait	[Bob finished a difficult class assignment] b/c he is smart
617	Agent: Stable propos. state	[She made it through the crisis] b/c she believes things will always turn out for the best
618	Agent: Role, membership	[She finished the paper] because she is a senior
620	Situation	[Bob finished the assignment] b/c it was not difficult
631	Agent+Situation interaction	[She won the game] because things went her way
641	OtherPerson: Behavior	[Mary bought a new car] b/c her brother gave her money
651	Agent+OtherPerson interaction	[Jack wrote a great paper] b/c he talked with the teacher
656	Agent passive	[Mary, who is poor, bought a new car] b/c she was given a loan

Key Questions to Decide Between the Four Modes

