

T-Logic: Part of Logic of Coercion

Logic of Coercion

- 1) C-Events
- 2) Attempts at C
- 3) Successful C-Attempts

Basics

- A >> B** A causes B
- D(X,f)** X does f
- B(X,A)** X believes that A
- W(X,A)** X wants that A

1 C-Events

1.1 The most general sense

Necessary conditions for **C(Y,E,h)** – Y is being coerced by event E to do action h:

- (1) E>>D'(Y,h)
- (2a) POSS(¬D'(Y,h))
- (2b) B^{0'}(Y,POSS(¬D'(Y,h)))
- (3) W^{00'}(Y,¬D'(Y,h))
- (4) E>>W^{0'}(Y,D'(Y,h))
- (5) (1*) as a consequence of (4*)

1

¹ Sorry, not all of the signs will be understood without further explanations. The indices „^{0'} „, e.g., are referring to various time points.

- D1 $\boxed{C}_g(Y,E,h) :=$
- (a) $D'(Y,h)$
 - (b) $W^{00'}(Y, \neg D'(Y,h))$
 - (c) $E \gg W^{0'}(Y, D'(Y,h))$

Y is coerced by E to do h iff (a) Y does h even though (b) he originally wanted not to do h – and this because (c) E caused him to want to do h rather than not after all.

1.2 Consequence-based \boxed{C}-Events
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$\boxed{C}(Y,E,C,h)$ Y is being coerced by event E – in view of the (supposed) E-consequence C – to do action h:

$\boxed{C}(Y,E,h)$ plus:

(6a) $E \gg B^{0'}(Y, \neg D'(Y,h)) \gg C$

(6b) $W^{0'}(Y, \neg C)$

(7) (4) as a consequence of (6a) and (6b)

(4) $E \gg W^{0'}(Y, D'(Y,h))$

(KANT) $W(a,A) \ \& \ B(a,A \supset B) \rightarrow W(a,B)$

”He who wants the purpose (given that reason has a decisive influence on his actions) also wants [according to the agent’s belief] the means necessary for the purpose.” Kant, *Grundlegung zur Metaphysik der Sitten*, B 44–45.

$$\begin{aligned}
 \mathbf{D2:} \quad \boxed{C}(Y,E,C,h) &:= \quad (\mathbf{a}) \quad D'(Y,h) \\
 &\quad (\mathbf{b}) \quad W^{00'}(Y,\neg D'(Y,h)) \\
 &\quad (\mathbf{c}) \quad E \gg B^{0'}(Y,\neg D'(Y,h)) \gg C \\
 &\quad (\mathbf{d}) \quad W^{0'}(Y,\neg C)
 \end{aligned}$$

Y is coerced to do h in view of the (supposed) E-consequence C iff Y (a) does h, although (b) Y originally did want not to do h, because (c) E made Y believe that not doing h would bring about the consequence C – a consequence which (d) Y wants not to occur.

Special case: $E = D(X,f)$.

2 Attempts at \boxed{C}

2.1 The most general case

Instrumental doing (= intention with)

D0: $I(X,f,A') := D(X,f) \ \& \ W^0(X,A') \ \& \ B^0(X,D(X,f) \gg A')$
 By doing f X intends to bring about A' (i.e. A at t') iff X does f, X wants A', and X believes that by doing f he makes it the case that A'.

D3: $\boxed{C}^{\text{AT}}_{\text{mg}}(X,Y,f,h) := I(X,f,\boxed{C}_g(Y,T(X,f),h))$

Y tries by doing f to (in a *most general* sense) $\text{coerce}_{\text{mg}}$ Y to do h iff X intends by doing f that Y by X's doing f is being coerced_g to do h.

$$T.\boxed{C}1: \boxed{C}^{\text{AT}}_{\text{mg}}(X, Y, f, h) \leftrightarrow \begin{aligned} & \text{(i)} \quad D(X, f) \\ & \text{(ii)} \quad W^0(X, D'(Y, h)) \\ & \text{(iii)} \quad B^0(X, W^{00'}(Y, \neg D'(Y, h))) \\ & \text{(iv)} \quad B^0(X, D(X, f) \gg W^{0'}(Y, D'(Y, h))) \end{aligned}$$

2.2 Consequence-based \boxed{C} -Attempts

$$D4: \boxed{C}^{\text{AT}}_{\text{g}}(X, Y, f, C, h) := I(X, f, \boxed{C}(Y, D(X, f), C, h))$$

$$T.\boxed{C}2: \boxed{C}^{\text{AT}}_{\text{g}}(X, Y, f, C, h) \leftrightarrow \begin{aligned} & \text{(i)} \quad D(X, f) \\ & \text{(ii)} \quad W^0(X, D'(Y, h)) \\ & \text{(iii)} \quad B^0(X, W^{00'}(Y, \neg D'(Y, h))) \\ & \text{(iv)} \quad I(X, f, B'(Y, \neg D'(Y, h)) \gg C) \\ & \text{(v)} \quad B^0(X, W^{0'}(Y, \neg C)) \end{aligned}$$

Special case: $C = D''(X, r)$.

2.3 Agent's Response Oriented \boxed{C} -Attempts

$$D5: \boxed{C}^{\text{AT}}(X, Y, f, r, C, h) := \begin{aligned} & \text{(1)} \quad I(X, f, \boxed{C}(Y, T(X, f), C, h)) \\ & \text{(2)} \quad I(X, f, B^{0'}(Y, \neg D'(Y, h)) \gg D''(X, r)) \\ & \text{(3)} \quad B^0(X, B^{0'}(Y, D''(X, r)) \gg C) \end{aligned}$$

$$T.\boxed{C}3: \boxed{C}^{\text{AT}}(X, Y, f, r, C, h) \leftrightarrow \begin{aligned} & \text{(i)} \quad D(X, f) \\ & \text{(ii)} \quad W^0(X, D'(Y, h)) \\ & \text{(iii)} \quad B^0(X, W^{00'}(Y, \neg D'(Y, h))) \\ & \text{(iv.a)} \quad I(X, f, B^{0'}(Y, \neg D'(Y, h)) \gg D''(X, r)) \\ & \text{(iv.b)} \quad B^0(X, B^{0'}(Y, D''(X, r)) \gg C) \\ & \text{(v)} \quad B^0(X, W^{0'}(Y, \neg C)) \end{aligned}$$

3 Successful C-Acts

Successful instrumental doing

$$D0.1 \quad I^S(X,f,A') := I(X,f,A') \ \& \ (D(X,f) \gg A')$$

X's attempt by doing f to cause A' is successful iff by doing f, X intends to achieve (attempts) A', and his doing f actually brings it about that A'.

$$D3.1 \quad \boxed{C}_{mg}^S(X,Y,f,h) := \boxed{C}_{mg}^{AT}(X,Y,f,h) \ \& \ \boxed{C}_g(Y,T(X,f),h)$$

$$D4.1 \quad \boxed{C}_g^S(X,Y,f,C,h) := \boxed{C}_g^{AT}(X,Y,f,C,h) \ \& \ \boxed{C}(Y,T(X,f),C,h)$$

$$D5.1 \quad \boxed{C}^S(X,Y,f,r,C,h) := \begin{aligned} &(1) \ \boxed{C}^{AT}(X,Y,f,r,C,h) \\ &(2) \ D'(Y,h) \\ &(3) \ W^{00'}(Y, \neg D'(Y,h)) \\ &(4a) \ D(X,f) \gg B^{0'}(Y,D'(Y,h)) \gg \\ &\quad D''(X,r) \\ &(4b) \ B^{0'}(Y,D''(X,r)) \gg C \\ &(5) \ W^{0'}(Y, \neg C) \end{aligned}$$

$$T.\boxed{C}4: \ \boxed{C}^S(X,Y,f,r,C,h) \leftrightarrow \boxed{C}^{AT}(X,Y,f,r,C,h) \ \& \ \boxed{C}(Y,T(X,f),C,h) \ \& \ (4a) \ \& \ (4b)$$

Corollary: Not-Successful Coercion vs. Coercion Failure

$$T.I1 \quad I^S(X,f,A') \leftrightarrow \begin{aligned} &(a) \ D(X,f) \ \& \ W^0(X,A') \ \& \\ &\quad B^0(X,D(X,f) \gg A') \ \& \\ &(b) \quad D(X,f) \gg A' \end{aligned}$$

Failure of $I(X,f,A')$

$$D0.1.1: I^F(X,f,A') := I(X,f,A') \& \neg A'$$

$$D5.2 \quad \boxed{C}_{mg}^F(X,Y,f,h) := \boxed{C}_{mg}^{AT}(X,Y,f,h) \& \neg D'(Y,h)$$

An attempt by X by doing f to coerce Y to do h is an (obvious) failure iff X doing f was such an attempt but nevertheless Y does not h .

$$\text{(False!)} \quad \neg \boxed{C}_{mg}^F(X,Y,f,h) \rightarrow \boxed{C}_{mg}^E(X,Y,f,h)$$

Back to Starting Example² (Cafe House Bombing)

That T-Act eventually a special case of an **Agent's Response Oriented \boxed{C} -Attempt**, i.e., of $\boxed{C}^{\text{AT}}(X, Y, f, r, C, h)$

[X] X's secession-group
 F government
 R(F) F releases the prisoners
 R*([X]) [X] continues to bomb Cafe House Visitors
 C F will loose elections

There, it holds that

$C^{\text{AT}}([X], F, T, R^*, C, R)$

- (i) $D([X], T)$
- (ii) $W^0([X], R'(F))$
- (iii) $B^0([X], W^{00'}(F, \neg R'(F)))$
- (iv.a) $I([X], T, B^{0'}(F, \neg R'(F)) \gg R^{*''}([X]))$
- (iv.b) $B^0([X], B^{0'}(F, R^{*''}([X])) \gg C)$
- (v) $B^0([X], W^{0'}(Y, \neg C))$

(iv.b) & (v) $\rightarrow B^0([X], W^{0'}(F, \neg R^{*''}([X]))$
 & with (iv.a): $B^0([X], W^{0'}(F, R'(F)))$.

² See „Terror & Counter-Terror“, Publications Online.

$$C^{AT}([X], F, T, R^*, C, R)$$

And there it is also true that

$$C^{AT}([X], F, I^S(X, I^S(X, T, VV(Y)), H(Z))), R^*, C, R) \quad (\Omega)$$

VV(Y) Violence Victim (Cafe House Visitors)

H(Z) Horror (City / Country Population)

$$(\Omega) \rightarrow I([X], T, VV(Y))$$

$$(\Omega) \rightarrow I([X], T, H(Z))$$

$$(\Omega) \rightarrow I([X], T, R(F))$$

$$(\Omega) \rightarrow I([X], I^S([X], T, VV(Y)), H(Z))$$

Violence Calculus

$$(\Omega) \rightarrow I([X], I^S([X], T, H(Z)), R(F))$$

Terror-Calculus

$$(\Omega) \rightarrow I([X], I^S([X], T, VV(Y)), R(F))$$

Next points:

- Successfull T-Acts
- T-Acts-Failure
- no Failure but also no Success.
- Safeguarding Measures against \boxed{C} -Acts in general and against T-Acts, in particular / map of logical possibilities

Some **Counter-T-Acts** are special cases of **Deterrent Acts**. For these cases: Logic of CT-Acts a Part of the Logic of Coercion, too – as Deterrence = Negative Coercion. See my *Logic of Deterrence*.

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