

Synopsis.

Domain of discourse = {ends (x,y,z) and dispositions $(\delta^x,\delta^y,\delta^z)$ of some agent S }

Symbols: $\forall \exists ! \sim \wedge \vee \rightarrow \leftrightarrow =$ (identity) \approx (equivalence)

Terms:

Standard first-order logic (*FL*) lets *FL names* represent proper names in a natural language. But proper names are only one type of grammatical subject term. A *grammatical subject term* is any finite sequence of words in a natural language (1) that, as a matter of grammatical protocol, may be used to refer to an object, and (2) when used as such represents the *informational subject* of a sentence. There are more than a dozen types of grammatical subject terms in English. Edwards uses definite descriptions and (non-functional) genitive noun phrases. For examples, “the end for which God created the world” and “God’s faithfulness”, respectively. The former names a state of affairs and the latter a disposition. We may stipulate a way for an *FL name* to stand for these. Thus we have these four:

Δ = the end for which created the world (a concrete state of affairs)

c = the universe; the creation (a concrete state of affairs).

f = God’s faithfulness (a disposition to fulfill promises)

j = God’s justice (a disposition which is both a love of justice and hatred of injustice).

Property predicates:

A^1 = ① is (dispositionally) agreeable to S

B^1 = ① is a subordinate end.

C^1 = ① is a chief end.

D^1 = ① is such that its agent is motivated to seek and occurrently to value it by virtue of some disposition.

F^1 = ① is a fulfillment of God’s promises

G^1 = ① is God’s.

H^1 = ① is a sequence of ends.

I^1 = ① is an inferior end.

J^1 = ① is an achievement of justice.

L^1 = ① is the last end in a sequence of ends.

N^1 = ① is a consequential ultimate end.

O^1 = ① is an original ultimate end.

R^1 = ① is a work of providence.

S^1 = ① is sought for its own sake.

U^1 = ① is an ultimate end.

V^1 = ① is (occurrently) inherently valued by S .

Relational predicates:

D^2 = ① is a disposition which “causes” S to seek ②.

F^2 = S values ① less than ②.

L^2 = ① is a link in ②.

M^2 = S seeks ① is a means to ②.¹

N^2 = the value of ① depends entirely on the value of ②.

P^2 = S values ① more than ②.

\approx^2 = ① is valued equally with ②.

$^1 \prec^2$ = ① is occurrently agreeable to S before S considers seeking ②.

$^1 \succ^2$ = ① is occurrently agreeable to S after S considers seeking ②.

¹ Means are prerequisite conditions and as such are presupposed.

- Pst 0 **Creation is a means to God's ultimate end.** (Implicit in the title)
 $U_{\Delta} \wedge Bc \wedge Mc_{\Delta}$
- [1] Pst1 **Every chief end is an ultimate end.** [1]
 $\forall x(Cx \rightarrow Ux)$
- Prop1 **Not every ultimate end is a chief end.** [1]
 $\sim \forall x(Ux \rightarrow Cx)$
- [2] Prop2 **A chief end is opposite to an inferior end.** [2]
 $\forall x(Cx \leftrightarrow \sim Ix)$
- Prop3 **An ultimate end is opposite to a subordinate end.** [2]
 $\forall x(Ux \leftrightarrow \sim Bx)$
- D1 **A subordinate end is a means to some other end and its value depends entirely on the value of that end.** [2]
 $\forall x(Bx \leftrightarrow \exists y(Mxy \wedge Nxy))$
- CN1 **An end is a means to another if and only if the second is not a means to the first.** [2]
 $\forall x \forall y (Mxy \leftrightarrow \sim Myx)$
- CN2 **An end is sought for its own sake if and only if there is no end to which it is a means.**² [2]
 $\forall x(Sx \leftrightarrow \sim \exists y Mxy)$
- [3] D2 **An end, insofar as it is *ultimate* is (1) (occurrently) valued *inherently*, not derivatively, and (2) sought for *their own sakes* and (3) not as a means to other ends.**
 $\forall x(Ux \leftrightarrow (Vx \wedge Sx \wedge \sim \exists y Mxy))$ [3]
- CN3 **An end is occurrently inherently valued by S if and only if it is not a means to another end.**
 $\forall x(Vx \leftrightarrow \sim \exists y Mxy)$
- CN4 **If an end is (1) (occurrently) valued *inherently*, not derivatively, and (2) sought for *its sake*, then its value does not depend on the value of another end.**
 $\forall x(Vx \wedge Sx) \leftrightarrow \sim \exists y Nxy)$
- [4] Pst2 **For every subordinate end there is an ultimate end to which it is a means.** [4]
 $\forall x(Bx \leftrightarrow (\exists y Uy \rightarrow Mxy))$
- Pst3 **Some subordinate ends are means to other subordinate ends.** [4]
 $\exists x \exists y (Bx \wedge By \wedge Mxy)$

² This is proportionate whenever an end has the features of both a subordinate and an ultimate end.

- D3 A chain of ends is a sequence of ends ending with one ultimate end. [4]
 $\forall x(Hx \leftrightarrow \exists y \exists z (By \wedge Bz \wedge \exists !u (Uu \wedge (Myu \vee (Mzu \wedge Myz))))))$
- [5] D4 A last end is the final link in a chain of ends. [5]
 $\forall x(Lx \leftrightarrow \sim \exists y Mxy)$
- Prop4 Every end valued and sought for its own sake and not for the sake of something else is an ultimate end and a last end. [5]
 $\forall x ((Vx \wedge Sx \wedge \sim \exists y Mxy) \leftrightarrow (Ux \wedge Lx))$
- CN5 If an end is instrumental to another, then there is a chain and both ends are links in it. [5]
 $\forall x \forall y (Mxy \rightarrow \exists z (Hz \wedge Lxz \wedge Lyz))$
- Corol. 1 Every ultimate end is a last end and every last end is an ultimate end. [5]
 $\forall x (Ux \leftrightarrow Lx)$
- [6] Some ends may be partly ultimate and partly subordinate.
- [7] D5 A chief (supreme) end is the most valued end in a work. [7] A chief end is the most valued in a chain of ends.[7]
 $\forall x(Cx \leftrightarrow \forall y Pxy) \qquad \forall x(Cx \leftrightarrow \exists y(Hy \wedge Lxy \wedge \forall z(Lzy \rightarrow Pxy)))$
- D6 An inferior end is less valued than some other end.[7]
 $\forall x(Ix \leftrightarrow \exists y Pyx)$
- CN6 An end is more valued than another if and only if it is false that the second is more valued than or equally valued with the first.[7]
 $\forall x \forall y (Pxy \leftrightarrow \sim Pyx)$
- CN7 If two ends are equally valued, then neither is more valued than the other.[7]
 $\forall x \forall y ((x \approx y \rightarrow \sim (Pxy \vee Pyx))$
- CN8 If one end is more valued than another, they are not identical.[7]
 $\forall x \forall y (Pxy \rightarrow x \neq y)$
- [8] Pst4 If one ultimate end is more valued than another in a work, it is a chief end.[8]
 $\exists x \forall y ((Ux \wedge Uy \wedge Pxy)$
- [9] Some subordinate ends are more valued than some ultimate ends in a work.[9]

General Positions

- [10] Pst5 [POSITION ONE] Some subordinate ends are more valued than an ultimate end to which it is not a means. [10]

$$\exists x(Bx \wedge \exists y (Uy \wedge \sim Mxy \wedge Pxy))$$
- [11] Pst6 [POSITION TWO] An ultimate end is more valued than any of its subordinate ends (unless for any one of them there is no alternative). [11]

$$\forall x(Ux \rightarrow \forall y(Myx \rightarrow Pxy))$$
- [12] Since a person's last ends seldom depend only and obviously on one subordinate end or chain of such ends, that person's last ends are usually their most valued ends.
- [13] Prop5 If an agent has only one ultimate end, then his *last* end is his supreme end. [13]

$$\exists!xUx \rightarrow \forall y(Ly \rightarrow My)$$
- CN9
$$\exists!xUx \leftrightarrow \forall y\forall z((Uy \wedge Uz) \rightarrow y = z)$$
- [14] Lemma If an agent has only one ultimate end, then his *last* end is his supreme end and is more valued than any one of its means (unless for any one of them there is no alternative). [14]

$$\exists!x(Ux \rightarrow ((Lx \rightarrow Cx) \wedge \forall y(Myx \rightarrow Pxy)))$$
- CN10 If an agent has only one ultimate end, then his last end is his ultimate end.

$$\exists!x(Ux \rightarrow \forall y(Ly \rightarrow y = x))$$
- Prop6 [POSITION THREE] If God has only one ultimate end, then his *last* end is his supreme end and is more valued than any of its means (unless for any one of them there is no alternative). [14]
- [15] From what has been said, we may infer the following:
- [16] Prop7 [POSITION FOUR] Whatever an agent seeks and values for its own sake is his last end. [16]

$$\forall x(Lx \leftrightarrow (Sx \wedge Vx \wedge \sim \exists yMxy))$$
- Pst7 If S seeks and values an end for its own sake, then it is such that its agent is motivated to seek and occurrently to value it by virtue of some disposition. [16],[18]

$$\forall x((Sx \wedge Vx \wedge \sim \exists yMxy) \rightarrow Dx)$$
- CN11 An end is such that its agent is motivated to seek and occurrently to value it by virtue some disposition if and only if there is a disposition that causes S to seek and occurrently to value it. [16],[18]

$$\forall x(Dx \leftrightarrow \exists yDyx)$$
- CN12 An end is such that its agent is motivated to seek and occurrently to value it by virtue some disposition if and only if it is (dispositionally) agreeable to S. [16],[18]

$$\forall x(Dx \leftrightarrow Ax)$$

Therefore,

- [17] Prop8 If an agent has more than one end that are valued inherently and sought intrinsically, then he has more than one last end. If an agent has only one such end, then he has only one last end. [17]
A. $\exists x \exists z ((x \neq z \wedge (Sx \wedge \forall x \wedge \sim \exists y Mxy) \wedge (Sz \wedge \forall z \wedge \sim \exists y Mzy)) \rightarrow \exists x \exists z (Lx \wedge Lz \wedge x \neq z))$
B. $\exists !x (Sx \wedge \forall x \wedge \sim \exists y Mxy) \rightarrow \exists !y Ly$
- [18] D7 An original ultimate end is occurrently agreeable, prior to and independent of the existence or the imagining of any means to it. [18]
 $\forall x (Ox \leftrightarrow (Ux \wedge \forall y (Myx \rightarrow x < y)))$
- CN13 Every ultimate end is occurrently valued before the agent considers any means for achieving it.
 $\forall x (Ux \rightarrow \forall y (Myx \rightarrow x < y))$
- D8 A consequential ultimate end is occurrently agreeable only after and dependent on the existence or the imagining of some subordinate end. [18]
 $\forall x (Nx \leftrightarrow (\exists y Oy \wedge \exists z Mzy \wedge x > z))$
- CN14 If an end is occurrently agreeable to S either before or after S seeks or considers any other state, it is occurrently agreeable to S. [18]
 $\forall x \forall y ((x < y \vee x > y) \rightarrow Vx)$
- Prop9 [POSITION FIVE] The end for which God created the world is an original ultimate end and God is motivated to seek his end in creation by virtue of some disposition. [18]
 $O_{\Delta} \wedge D_{\Delta}$
- Corol2 God's end in creation was occurrently valuable to God before he even considered creation's existence.
 $\Delta < C$
- Pst 8 Whenever an agent S has both an original ultimate end and a consequential ultimate end, the dispositions that cause S to achieve them are not identical. [18]
 $\forall x \forall y \exists z \exists u ((Ox \wedge Ny) \rightarrow (Dzx \wedge Duy \rightarrow (z \neq u)))$
- Pst9 Only after the world was created is justice-accomplished occurrently agreeable to God for itself and God's love of justice is the disposition that disposition which causes S to seek and occurrently to value it.
 $\forall x (((Jx \wedge Vx) \rightarrow j < c) \wedge Djx)$

(Implicit) Therefore

- Prop10 The disposition that moved God to create in the first place it is not identical to any of the dispositions that moved God to achieve any consequential ultimate end. [18]
 $(O_{\Delta} \wedge \forall x D_{x\Delta}) \rightarrow (\forall y (N_y \wedge \forall z D_{zx}) \rightarrow \Delta \neq x)$
- and
- [19] Prop11 God's faithfulness (i.e., his disposition to fulfill his promises) is not what moved him to create the world, and his fulfilling them is not his ultimate end in creation. [19]
 $\sim D_{f\Delta} \wedge \forall x (D_{fx} \rightarrow x \neq \Delta)$
- Prop12 If the fulfillment of God's promises is a consequential ultimate end and a work of providence, then God's disposition to fulfill his promises (his faithfulness) is what moved him to bring about their fulfillment. [19]
 $\forall x ((F_x \wedge N_x) \rightarrow D_{fx}) ?$
- Prop13 Therefore, some works of providence are consequential ultimate ends but not God's original ultimate end. [19]
 $\exists x (R_x \wedge N_x \wedge \sim O_x \wedge x \neq \Delta)$
- [20] Prop14 God's justice is the disposition that causes God to do justice, which is a consequential ultimate end. [20]
 $\forall x (J_x \rightarrow (N_x \wedge D_{jx})) ?$
- [21] Prop15 Consequential ultimate ends are distinct from subordinate ends. [21]
 $\forall x (N_x \leftrightarrow \sim B_x)$
- [22] God's ultimate end in creating the world is an original ultimate end. [22]
(reiterates Prop 9 [18])

Application for interpretation and theology

- [23] 6. [POSITION SIX] (Taking God's *motive* into consideration) The DISPOSITION that moved God to achieve his original ultimate end is the sole cause of every subordinate end and, therefore, governs all that God does.³ [23]

Therefore (Taking God's *purpose* into consideration, on the one hand recognizing the difference between *original* and *consequential*)

- [24] 7. [POSITION SEVEN]

(Part A) Bearing *original ultimate end* in mind, then if God has only one original ultimate end, then every subordinate end is a means to it, and every use to which God puts his creatures is a means to achieving his original ultimate end.⁴ [24]

(Part B) Bearing *consequential ultimate end* in mind, some works of providence may be means to these and these cannot by their nature be God's original ultimate end in creation. [24]

Taking God's purpose into consideration, on the other hand regardless of the difference,

- [25] 8. [POSITION EIGHT] Whatever **appears to be** (i.e., revealed and meets the conditions of being) God's ultimate end

³ $D\delta^{\Delta} \rightarrow \forall y (B_y \rightarrow D\delta^{\Delta}y)$.

⁴ $O_{\Delta} \rightarrow \exists!x (O_x \rightarrow (\forall y B_y \rightarrow M_yx))$ or $(O_{\Delta} \wedge \sim \exists x (x = \Delta \wedge G_x) \rightarrow (\forall y B_y \rightarrow M_yx))$.

of God's works of providence in general is his ultimate end in creating the world. [25]

$\forall x(Rx \rightarrow x=\Delta)$ The claim seems to be epistemic, but the formal sentence isn't.

[26]

9. [POSITION NINE] If there is only one thing that God values intrinsically and God values it before anything was created, then there is only one original ultimate end AND if there are several things that God values intrinsically and God values them before anything was created, then there are several original ultimate ends. [26]