## Remarks to Rosen on Life Itself

Cliff Joslyn \* †

May 1992

## 1 Some Problems

- p. 85: There's a very serious problem towards the bottom of the page. Apparently a number of lines of text are missing.
- **p. 129:** The phrase "all b in B;" should be closed up in the display in the middle of the page.

**p. 171:** In figure 6D.1, the labels  $\alpha'$  and  $\alpha''$  should be by their points.

**pp. 195 ff.:** Use of X (even  $\chi$  on p. 196) and Y for X and Y.

**pp. 180, 205, 206, 211:** Should have C(N) or C(S) instead of C(N) or C(S).

**p. 250:** In moving from fig. [10C.3] to [10C.5], it seems that the colors of the arrows have been reversed.

**pp. 232-234:** Multiple instances of  $\Phi$  being replaced by  $\phi$ .

## 2 Some Simpler Problems

Page and Location	Is	Should Be?
3 4th para.	Of so, how?	If so, how?
7 4th para.	on the fact of it	on the face of it
33 Below last display	on X).	(on X).
36 2nd param	with every greater accuracy.	with ever greater accuracy.
43 2nd para.	new dualism distinct	new dualisms distinct
45 Bottom of page	a strong of imperatives	a string of imperatives
50 3rd para.	if they is simply	if there is simply
52 First parap.	the man question	the main question
62 Last para.	$N_1$	$N_1$
83 3rd display	$G = \{g_1, g_2, \dots, g^i, \dots\}$	$G = \{g_1, g_2, \dots, g_i, \dots\}$
83 Middle of page	$g_i$ in the set of relatively recursive, relative to	?
84 Middle of page	"derivatives'	"derivatives"
		'

<sup>\*</sup>Graduate Fellow, Systems Science, SUNY-Binghamton, 327 Spring St. # 2, Portland ME, 04102, USA, (207) 774-0029, cjoslyn@bingsuns.cc.binghamton.edu, joslyn@kong.gsfc.nasa.gov.

<sup>&</sup>lt;sup>†</sup>Supported under NASA Grant # NGT 50757.

Page and Location	Is	Should Be?
85 Last para.	the $f_i$	the $g_i$
87 Middle of page	$G = \{1, g_2\}$	$G = \{g_1, g_2\}$
88 4th display	$\ldots = (\prod_i g_i)(n)$	$\dots = T(\prod_i g_i)(n)$
94 Last para.	Let us pauses	Let us pause
116 2nd para.	just that metaphysical ideas	just those metaphysical ideas
122 Bottom of page	as indicated by the dotted line.	? There are no dotted lines.
128 Last para.	as an, effect	as an effect
130 Bottom of page	or, to use another metaphor	Or, to use another metaphor
130 Bottom of page	$A^{-}s$	$A^*$
132 First para.	produce	product
146 Display	$H_n(f): H_n(S_1): \mapsto H_n(S_2)$	$H_n(f): H_n(S_1) \mapsto H_n(S_2)$
146 2nd to last para.	factors	functors
148, 149 Bottom, top of page	$A  ext{ in } A$	?
150 Middle diaplay	$X \xrightarrow{f} A \xrightarrow{\theta_A} P(A)$	$X \xrightarrow{f} A \xrightarrow{\theta_A} R(A)$
156 Last para.	$\begin{array}{c} X \\ X = R \end{array}$	$X = \mathbf{R}$
160 Bottom of page	$\frac{X - R}{S/R_f} \cong f(S))$	$\begin{array}{c} A = \mathbf{R} \\ S/R_f \cong f(S) \end{array}$
161 1st para.	produce	product
161 Last para.	$II_f, II_q$	$\Pi_{f}, \Pi_{q}$
162 2nd display	$ \begin{array}{c} \Pi_{f}, \Pi_{g} \\ \theta(u) = (\varphi(u), \psi(\theta)) \end{array} \end{array} $	$ \begin{array}{c} \Pi_f, \Pi_g \\ \theta(u) = (\varphi(u), \psi(u)) \end{array} \end{array} $
164 4th para.	$ \begin{array}{l} \theta(u) = (\varphi(u), \psi(\theta)) \\ A(S) \end{array} $	$ \begin{array}{l} \phi(u) = (\varphi(u), \psi(u)) \\ \mathbf{A}(S) \end{array} $
165 Top of page	M	M
165 3rd para.	Price	Principal
165 Top and bottom of page	S	S S
168 Above and below figure		
169 2nd para.	$\begin{bmatrix} u \\ \{\alpha\}_i \end{bmatrix}$	$\left\{ \begin{array}{c} \sigma \\ \alpha_i \end{array} \right\}$
169 Last display	$\begin{bmatrix} \{\alpha\}_i \\ \dots = \prod_i U_\alpha / R_{f_i \alpha} \end{bmatrix}$	$\begin{bmatrix} \{\alpha_i\}\\ \dots = \prod_i U_\alpha / R_{f_{i\alpha}} \end{bmatrix}$
169 Bottom of page	$\begin{array}{c} \dots - \prod_i O_{\alpha} / n_{f_i \alpha} \\ f_{a \alpha} \end{array}$	$\begin{array}{c} \dots - \prod_i U_{\alpha} / M_{f_{i\alpha}} \\ \end{array}$
169 Bottom of page		$\int_{i\alpha'}^{\cdot}$
170 Top of page	$egin{array}{c} f_{ilpha}' \ U_{lpha}' \end{array}$	$egin{array}{c} Jilpha' \ U_{lpha'} \end{array}$
170 10p of page 171 1st para.	"because $u_{\alpha}$ "	"because $U_{\alpha}$ "
_		$3_{\alpha_0}$
172 1st para.	$3\alpha_0$ dotted arrows?	? There are no dotted arrows in figure 6
<ul><li>173 Last para.</li><li>175 End of 1st para.</li></ul>	FS	AS?
-		
178 Middle of page	$s \to \prod_{\alpha} f_{\alpha}(S) = \dots$	$\begin{array}{c} S \to \prod_{\alpha} f_{\alpha}(S) = \dots \\ (h, w(h)) \end{array}$
188 First para.	(ks, w(k))	(k, w(k))
192 Last para.	f/	•
195 After [7E.1] 105 Pottom of page	$X \times \{U\}$	$ \begin{array}{c} X \times \{u\} \\ \Pi \end{array} $
195 Bottom of page	$\prod_{x \in \mathcal{A}} \left( x \in \mathcal{A}_{\mathcal{A}}(x) \right)$	
200 [7F.2]	$\alpha(\varphi \Rightarrow (\alpha(\varphi(x)))$	?, perhaps $\alpha \varphi \Rightarrow \alpha(\varphi(x))$
208 Middle of page	$R^{\max}$ refines $\sum R_i^{\min}$	$M^{\max}$ refines $\sum M_i^{\min}$
208 Middle of page	$M_i^{\min} < M^{\max}$	$\sum M_i^{\min} < M^{\max}$
210 Bottom of page	$M < M^{\max}$	$M \leq M^{\max}$

Page and Location	Is	Should Be?
221 2nd para.	$\longrightarrow$ "	$"\longrightarrow$ "
237 Figure [9F.2]	Ξ	$\Psi$
244 2nd para.	red arrow, green arrow	black arrow, white arrow
246 Last para.	outside the environment	inside the system/into the environment
249 [10C.2]		Missing arrowhead
259 1st para.	factionated	fractionated
265 2nd para.	plymers	polymers
272 2nd para.	though	thought