



Title: Ausarbeitungen zur Programmierung des Schachspiels
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\overline{G} \overline{G}

$\exists y \exists z$ " $y \in f(x)$ "
 $y \in g(x)$ "

$L = (Z, G, K)$.

$\exists u \exists v \exists w \exists x \exists y \exists z$ " $u \in L_1, v \in L_2, w \in L_3, x \in L_4, y \in L_5, z \in L_6$ "

$$G(L) \sim \left[\begin{array}{l} Z(L_1) \wedge \exists L_2 [\exists u \exists v \exists w \exists x \exists y \exists z \\ \wedge Z(L_1) \wedge (L_2) [\exists u \exists v \exists w \exists x \exists y \exists z \rightarrow G(L_2)] \end{array} \right]$$

$L = (Z, G, K)$

$Z = \{ \exists y \exists z$ "

$$G = \left(\begin{array}{c} \exists y \exists z \\ \exists y \exists z \end{array} \right)$$

$K = \{ \exists y \exists z$ "

$$\begin{aligned} \tilde{g}(L) \sim & \left[\begin{array}{l} \exists L_1 [\exists u \exists v \exists w \exists x \exists y \exists z \wedge \tilde{g}(L_1) \wedge \tilde{g}(L_2)] \\ \wedge \exists L_2 [\exists u \exists v \exists w \exists x \exists y \exists z \wedge \tilde{g}(L_2)] \end{array} \right] \\ & \left[\begin{array}{l} \exists L_1 [\exists u \exists v \exists w \exists x \exists y \exists z \wedge \tilde{g}(L_1) \wedge \tilde{g}(L_2)] \\ \wedge \exists L_2 [\exists u \exists v \exists w \exists x \exists y \exists z \wedge \tilde{g}(L_2)] \end{array} \right] \end{aligned}$$

$$\tilde{g}(L_1) \sim [P(L_1) \wedge E[L_1 \wedge g(L_1, L_2) \wedge \tilde{g}^T] \\ \quad \vee [Z(L_1) \wedge (L_2) (Zg(L_1, L_2) \rightarrow \tilde{g}(L_2))]$$

$$G_0 \sim \tilde{g} \quad \text{✓/P}$$

$$G_1 \sim \tilde{g} \wedge \bar{\tilde{g}} \quad \text{✓/P}$$

$$G_2 \sim \tilde{g} \wedge \tilde{g} \quad \text{✓/P}$$

~~$L_2 \wedge L_1$~~

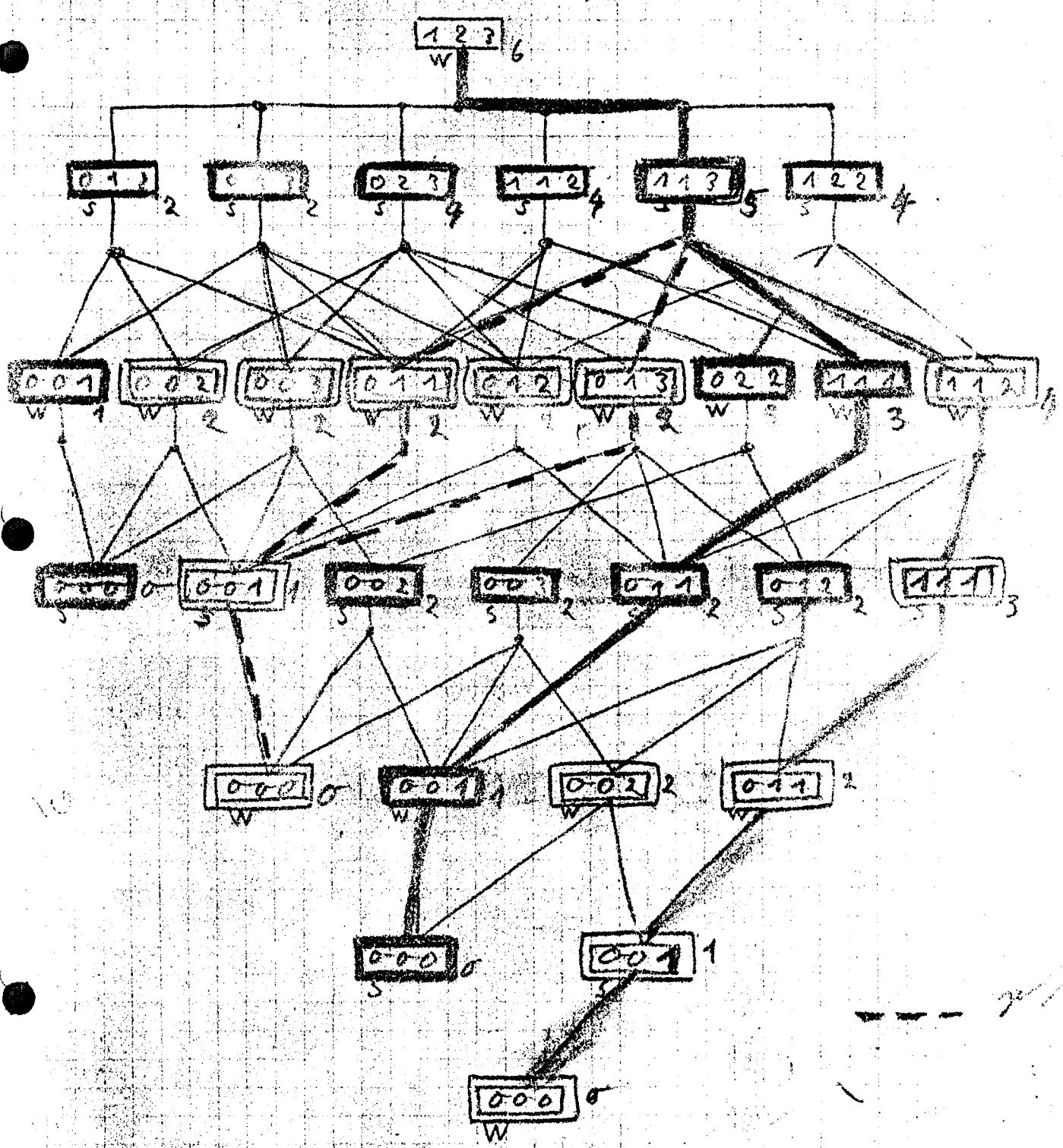
$$G_0'(L_2) = \exists L_1 [Zg(L_1, L_2) \wedge G_0(L_1)]$$

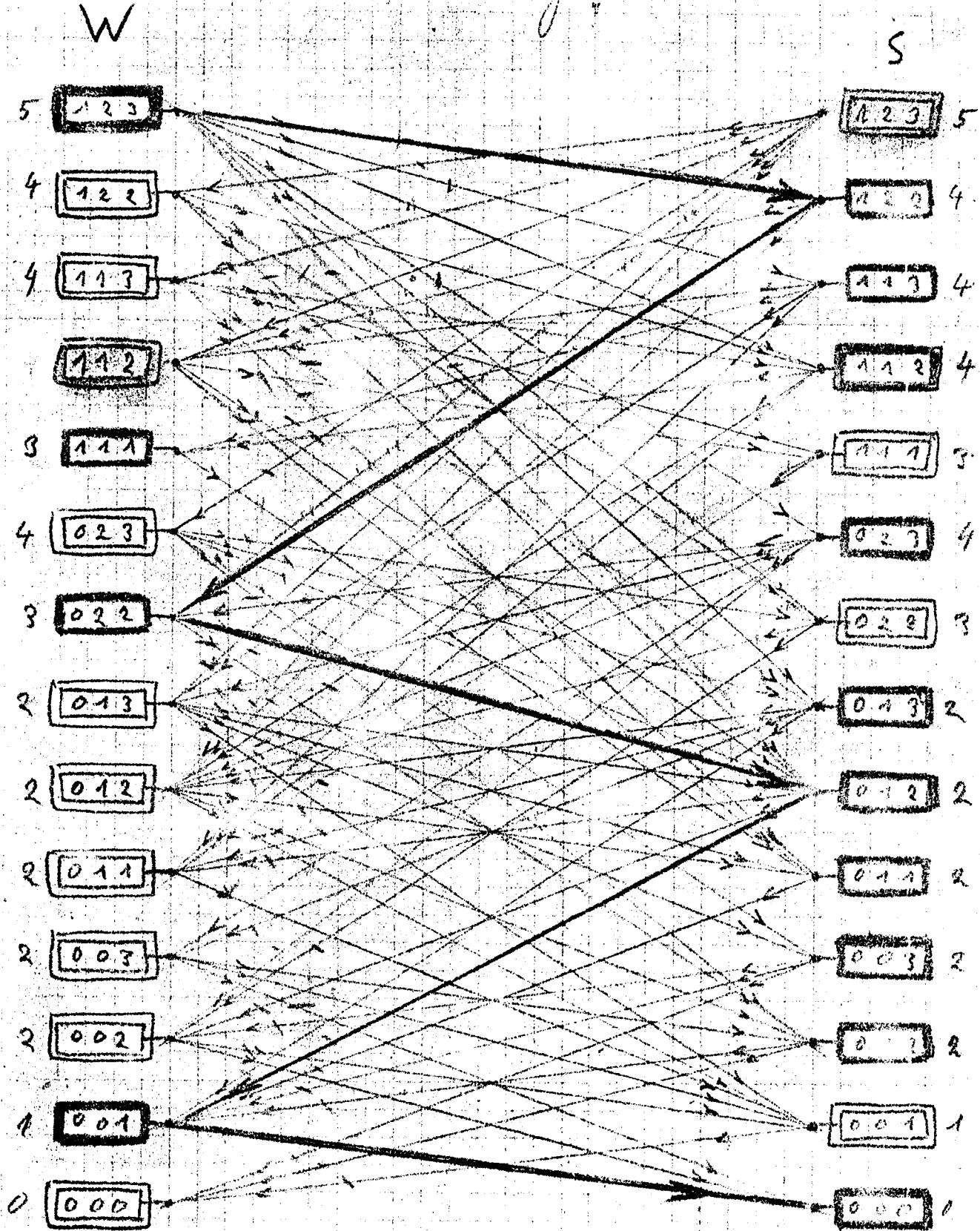
$$G_1'(L_1) = \exists L_2 [Zg(L_1, L_2) \wedge G_1(L_2)]$$

$$G_2'(L_2) = \exists L_1 [Zg(L_1, L_2) \wedge G_2(L_1)].$$

$$G_0(L_1) \sim [Z(L_1) \wedge G_0'(L_1) \wedge \bar{G}_2'(L_2)] \\ \vee [\bar{Z}(L_1) \wedge G_0'(L_1) \wedge \bar{G}_1(L_2)]$$

$$G_0 \sim G_0' \wedge (\bar{Z} \wedge \bar{G}_2') \vee (\bar{Z} \wedge G_1') \\ G_1 \sim \bar{Z} \wedge G_1' \vee (Z \wedge \bar{G}_0' \wedge \bar{G}_2') \\ G_2 \sim Z \wedge G_2' \vee (\bar{Z} \wedge \bar{G}_0' \wedge \bar{G}_1')$$





Dipl.-Ing. K. Zuse

Ingenieurbüro

und Apparatebau

Berlin

1 2 3

w 6

0 1 2

s 2

0 1 3

s 2

0 2 3

s 4

1 1 2

s 4

1 1 3

s 5

1 2 2

s 4

0 0 1

w 1

0 0 2

w 1

0 0 3

w 2

1 0 1 2

w 2

0 1 3 1

w 2

2 2

w 3

2 1 1

w 1

1 1 2

w 4

0 0 6

s 1

0 0 1 1

s 2

0 0 2

s 2

0 0 3

s 3

0 1 1

s 2

0 1 2

s 2

1 1 1

s 2

1 0 0

w 1

0 0 1

w 1

1 0 2

w 2

0 1 1

w 2

0 0 0 0

s 0

0 0 1 1

s 1

1 0 0 0

w 0

1) Spazieren → IR KfW
oder weiter

2) Spazieren → U2 - 1.6 - 2.2
in der Ecke - 0.1. 2. 3 fl.

3) Spazieren → U2 - 1.6 - 2.2

Punkt 1.1.1.1

• 1) WK, WT CK. $\forall v \in \mathbb{R}^n \quad 3 \times A\Delta 2 = A\Delta 2$

$\forall v \in \mathbb{R}^n \quad 3 \times A\Delta 2 / 2 = A\Delta 2$

$P4300. \quad \forall R(v) \Rightarrow R$

$$\begin{array}{c|ccccc} v & v & v & v & v \\ \hline V & 0 & 0 & 0 & 0 \\ K & 0 & 0 & 0 & 0 \\ A & 0.2 & 0.2 & 0.2 & 0.2 \end{array} \quad \begin{array}{c|ccccc} v & v & v & v & v \\ \hline V & 0 & 0 & 0 & 0 \\ K & 0 & 0 & 0 & 0 \\ A & 0.2 & 0.2 & 0.2 & 0.2 \end{array} \quad |v - v| > 1 \quad R \\ \hline \Delta 2 & \Delta 2 \\ \Delta 2 & \Delta 2 \end{array}$$

$\forall v \in \mathbb{R}^n \exists R(v) \wedge \forall v' \in \mathbb{R}^n \forall R(v')$

$P4301. \quad \forall v \exists R(v) \wedge \forall v' \in \mathbb{R}^n \forall R(v')$

$$\begin{array}{c|ccccc} v & v & v & v & v \\ \hline V & 0 & 0 & 0 & 0 \\ K & 0 & 0 & 0 & 0 \\ A & 0.2 & 0.2 & 0.2 & 0.2 \end{array} \quad \begin{array}{c|ccccc} v & v & v & v & v \\ \hline V & 0 & 0 & 0 & 0 \\ K & 0 & 0 & 0 & 0 \\ A & 0.2 & 0.2 & 0.2 & 0.2 \end{array} \quad |v - v| < 1 \quad R(v) \\ \hline \Delta 2 & \Delta 2 \\ \Delta 2 & \Delta 2 \end{array}$$

$P4302. \quad \forall v \exists R(v) \wedge \forall v' \in \mathbb{R}^n \forall R(v')$

$$\begin{array}{c|ccccc} v & v & v & v & v \\ \hline V & 0 & 0 & 0 & 0 \\ K & 0 & 0 & 0 & 0 \\ A & 0.2 & 0.2 & 0.2 & 0.2 \end{array} \quad |v - v| < 1 \quad R(v) \\ \hline \Delta 2 & \Delta 2 \\ \Delta 2 & \Delta 2 \end{array}$$

$P4303. \quad \forall v \exists R(v) \wedge \forall v' \in \mathbb{R}^n \forall R(v')$

$$\begin{array}{c|ccccc} v & v & v & v & v \\ \hline V & 0 & 0 & 0 & 0 \\ K & 0 & 0 & 0 & 0 \\ A & 0.2 & 0.2 & 0.2 & 0.2 \end{array} \quad |v - v| \leq 1 \wedge |v - v| \leq 1 \quad R(v) \\ \hline \Delta 2 & \Delta 2 \\ \Delta 2 & \Delta 2 \end{array}$$

aus dem Konzept

1) sechs Sagen zu einer

a) Mutter und Kind

b) Krieger

c) Landwirt

d) Lehrer

e) 2 Kinder

2) Es ist eine Menge von

3) aus folgenden Bildern

a) 100 m

b) 200 m

c) 300 m

d) 400 m

e) 500 m

f) 600 m

g) 700 m

h) 800 m

i) 900 m

j) 1000 m

k) 1100 m

l) 1200 m

m) 1300 m

n) 1400 m

o) 1500 m

p) 1600 m

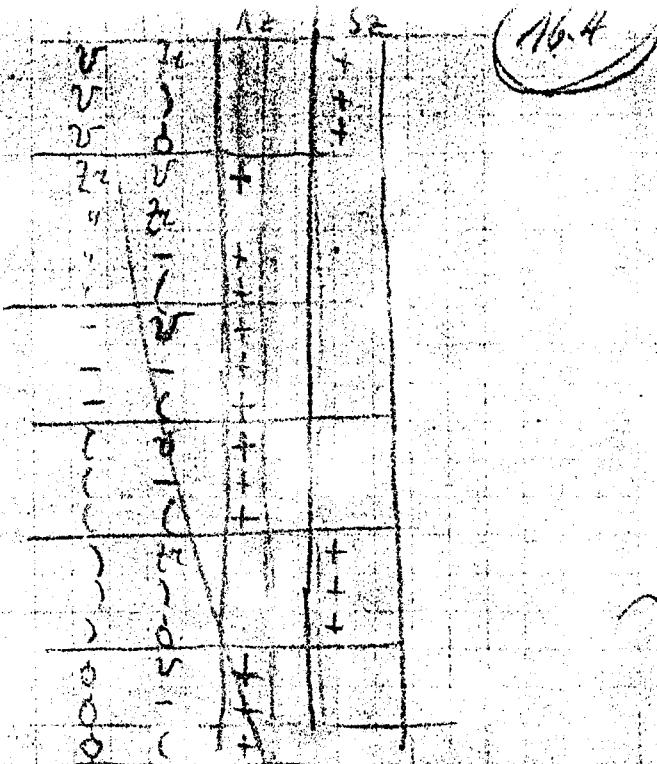
q) 1700 m

r) 1800 m

s) 1900 m

t) 2000 m

v_{ze}
-
 $\begin{pmatrix} 0 \\ 0 \end{pmatrix}$



(16.4)

-ve

A₃

$\begin{pmatrix} 0 \\ 0 \end{pmatrix}$

S2

-2 (q₁)

$\begin{pmatrix} 0 \\ 0 \end{pmatrix}$

①, ②

W₁

16.1 V
16.2 2x
16.3 -
16.4 C
16.5 2
16.6 X
16.7 X
16.8 →
16.9 2
16.10 2

16.1	V	+ 0 0 0 0 0 0
16.2	2x	- - - 0 0 0 0
16.3	-	- + 0 0 0 0
16.4	C	- + - - 0 0 0
16.5	2	- + - + 0 0 0
16.6	X	- + + 0 0 0 0
16.7	X	- + + 0 0 0 0
16.8	→	- + + 0 0 0 0
16.9	2	- + + 0 0 0 0
16.10	2	- + + 0 0 0 0

16.4

16.13

16.14

16.15

16.16

16.17

$$16.14: \quad \overline{v_m} \sqrt{(v_{m-1} \wedge v_{m-2}) \wedge (v_{m-2} \rightarrow v_{m-3})}.$$

A₃(x) \rightarrow v_{m-2}

$$16.15 \quad \overline{v_m} \sqrt{R16.6(v)}$$

S₂(x) \rightarrow v_{m-1}

$$16.16 \quad \overline{v_m} \wedge R16.6(v)$$

A₃(x) \rightarrow v_{m-2}

$$16.17: \quad \overline{R16.14(v)}$$

A₃(x) \rightarrow S₂

16.20: $\{v\}$ (some error)

$$\overline{G(v, v)} \Rightarrow R$$

$$(R16.16(v) \wedge R16.14(v)) \vee (R16.15(v) \wedge R16.14(v)) \vee R16.14(v)$$

~~2. der Übertragung ist das Gesetz
gesetzlich ab 1924 gültig~~

~~5. 10. 1924 ist das Gesetz
gesetzlich ab 1924 gültig~~

~~Def Co 6.~~ $\forall a \rightarrow Sa(x)$

~~Ex Ey (Sa(x) \wedge Sa(y)) \wedge \forall v - (x, y, v) \rightarrow Sa(v)~~

~~$v = (x, y, z) \rightarrow$~~

$R\Delta 0(v, z) \rightarrow R \quad \text{def: } Sa(v)$

~~Def DxD \square^{\otimes}~~

~~$(v, z, w) \rightarrow R$~~

$R\Delta 0'(v)$

$\exists x \exists y (Sa(x) \wedge Sa(y) \wedge R\Delta 0(x, y))$

$\forall a (v) \rightarrow Sa(v)$

$(Sa(v) \wedge Sa(v) \wedge R\Delta 0(v, v) = v) \rightarrow Sa(v)$

$\exists x \exists y (Sa(x) \wedge Sa(y) \wedge R\Delta 0(x, y) = v) \rightarrow Sa(v)$

~~Def DxD~~

$R\Delta 0'(v)$

$\exists x \exists y \exists z (x \in v \wedge \varphi(x) \wedge \exists a [\forall y (y \in v \wedge J(y) < J(x))]$
 $\wedge \exists a [\forall y (y \in v \wedge J(y) > J(x))]]$

~~Def DxD~~

$R\Delta 0'(v) \rightarrow E(x)(x \in v \wedge \varphi(x))$

~~Def DxD~~

$\overline{E(x)(x \in v \wedge \varphi(x))} \rightarrow \overline{R\Delta 0'(v)}$

$Ae \rightarrow Aa$: Eao $Ae \rightarrow Ab$: Ebo

$Ae \rightarrow Af$: Efa
 $Ae \rightarrow ly$: Egl
 $Ae \rightarrow /c$: Fc

$Af \rightarrow Aa$: Eao $Af \rightarrow Ac$: Efa

$Af \rightarrow Ae$: Eao

$Af \rightarrow Ab$: Efb

$C \rightarrow Af$: Efc

$C \rightarrow ly$: Egl

$Ag \rightarrow T$

$T \rightarrow Af$

Ex. 1: $\forall a(\exists) \rightarrow Sa(x)$

$R\exists 0'(z) \rightarrow Va(z)$

$\forall a(\exists) \rightarrow \forall a(\forall z R\exists 0'(z) \rightarrow Sa(z))$

$R\exists 0'(z) \rightarrow [Va(z) \rightarrow Sa(z)]$

~~$\forall a(\exists) \rightarrow \forall a(\forall z R\exists 0'(z) \rightarrow \exists x(x = z \wedge R\exists 0'(x)))$~~

$(\forall a(\exists) \rightarrow \forall a(\forall z R\exists 0'(z) \rightarrow \exists x(x = z \wedge R\exists 0'(x))) \wedge (\exists x(x = z \wedge R\exists 0'(x))) = 2)$

$\rightarrow \exists x(\exists z R\exists 0'(z))$

$\exists x(\exists z R\exists 0'(z)) \Rightarrow \overline{R\exists 0'(z)}$

$R\exists 0'(z) \rightarrow [Va(z) \rightarrow Sa(z)]$

Ex. 2:

$(\forall a(\exists) \rightarrow \forall a(\forall z R\exists 0'(z) \rightarrow \exists x(x = z \wedge R\exists 0'(x)) = 2) \wedge (\exists x(x = z \wedge R\exists 0'(x)) = 2)$

$\rightarrow [Va(z) \rightarrow Sa(z)]$

W p13
W p94
W p94 2
W p95
W p95
W p95

$$RDO(v) \rightarrow R$$

with α β

$$(v, \alpha, \beta) \rightarrow R$$

$$RDO(v) \sim [Ex(Ey)(\text{soc}(x) \wedge RDO(y) = v)]$$

$$\text{soc}(x) \rightarrow \text{Sa}(x)$$

$$\text{soc}(v) \rightarrow \text{Sa}(v)$$

$$RDO(v) \rightarrow \text{Sa}(v)$$

$$\text{soc}(v) \vee RDO(v) \rightarrow \text{Sa}(v)$$

$$(\exists y) \text{soc}(y) \wedge \text{Sa}(y)$$

$$(\exists y) (\text{soc}(y) \wedge \text{Sa}(y))$$

$$Ex(\text{soc}(x), x) \rightarrow \text{Sa}(x)$$

thus α

$$\text{Sa}(x) \rightarrow \text{Sa}(v)$$

$$Ex(Ey) [(\exists z) (x, z) = v \wedge \text{Sa}(z) \wedge Q(y)] \rightarrow \text{Sa}(v)$$

α β

$$\text{Sa}(v) \vee [Ex(Ey) [(\exists z) (x, z) = v \wedge \text{Sa}(z) \wedge Q(y)] \rightarrow \text{Sa}(v)]$$

α β

E

$$\frac{hv}{c^2} = m$$

$$\frac{hv}{c^2} = m$$

$$\boxed{\frac{hv}{c} = \frac{h}{\lambda}}$$

$$= G$$

Zuordnung eines Gravitions zu einer Wellenlänge.

Zuordnung einer Wellenlänge zu einem Feldwert

$$\boxed{mv = \frac{h}{\lambda}}$$

$$\lambda = \frac{h}{mv}$$

$$\int G ds = m v t$$

$$mv \cdot a \cdot dt = h m$$

$$mv \cdot a = \frac{hv}{dt}$$

~~mv~~

$$\frac{E}{c^2} = m$$

$$\frac{hv}{c^2} = mv$$

$$\frac{h}{\lambda} = mv$$

$$\boxed{\frac{h}{\lambda} = \frac{mv}{t}}$$

2d.

~~Def. von \exists und \forall~~
~~Def. von \exists und \forall~~
~~Def. von \exists und \forall~~

$$\cancel{\exists a(x) \rightarrow (x) \left[x = j(y) \wedge y < m \right] \rightarrow \exists a(j) }$$

~~$m > 0$~~

$$\cancel{\exists a(v) \rightarrow (x) \left[x < m \rightarrow \exists a \left[\exists y \left(y < v \wedge j_y < x \right) \right] \right]}$$

~~$m > 0$~~

$$\cancel{\exists a(v) \rightarrow (x) \left[\exists y \left(j_x y = v \right) \rightarrow \exists a(x) \right]}$$

~~$m > 0$~~

Was ist nun $\exists a(x)$?

$$\cancel{\exists a(v) \wedge \exists y \left(j_x y = v \right) \rightarrow \exists a(x)}$$

$$\cancel{v \in \mathbb{N} \wedge \exists y \left[\forall m \left(m < v \rightarrow j_m y = v \right) \right] \rightarrow \exists a(v)}$$

aus: $y \leq m$

$$\cancel{\left(\forall a(v) \right) \left[v \in \mathbb{N} \right]}$$

$$v = 'v' \quad \text{aus} \quad \cancel{\left(\forall a(v) \right) \left[v \in \mathbb{N} \right]}$$

$$\cancel{\exists a(v) \rightarrow (x) \left[x = 'v' \right] \rightarrow \exists a(x)}$$

$$\cancel{\exists a(v) \wedge (v = 'v') \rightarrow \exists a(v) \quad \left| \quad \exists a(v) \rightarrow \exists a('v') \right.}$$

P210

ACV 3/3 R
00
Dex 00

$P = 20 \text{ ton}$ Sicherheitsfaktor 3

$P_k = 60 \text{ mm } \text{kg}$

$$P_k = \frac{\sigma E}{2} =$$

$$67 \cdot 10^6$$

$$\frac{P_k \cdot l^2}{E} = \frac{60 \text{ N} \cdot 260}{2 \cdot 1 \cdot 10^6} = 117 \text{ cm}^4$$

$$= 900 \text{ cm}^4$$

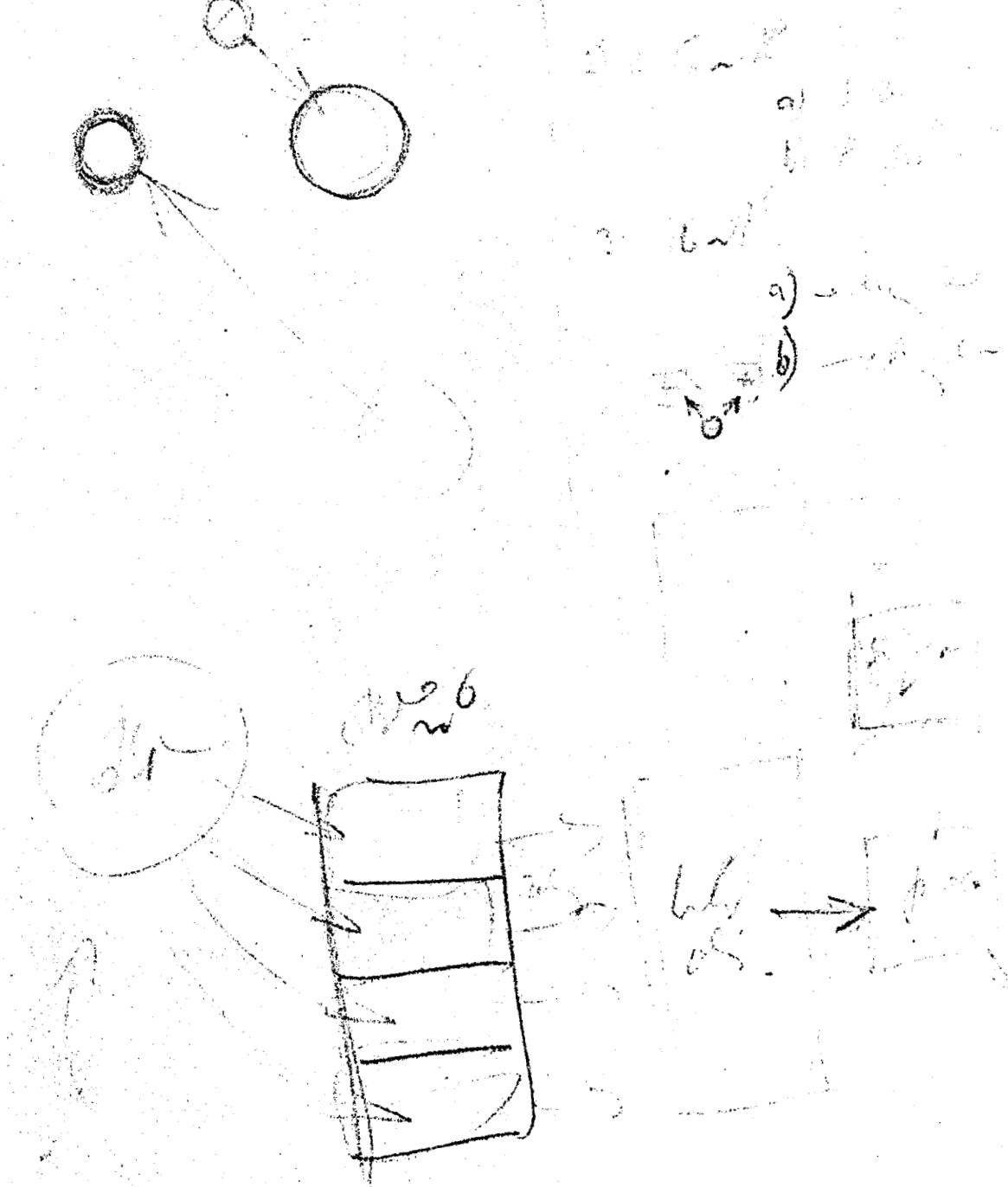
$$10^4 \cdot 8^4 = 200 \text{ cm}^4$$

$$= 57 \text{ cm}^4$$

$$90 \times 10^3 \cdot 3 = 270 \text{ cm}^4$$

Rohr 90 x 10 cm^4

Stahl 20



Comp: 213 of 214, 11/16/81
Copy of [B, S, L, T, P, K] on the page of the original
3) 11/16 - 11/17 on the way to Long Beach
5) 11/17

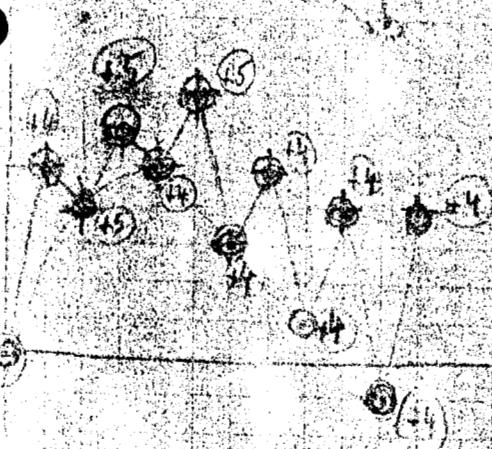
be his ac.

100% by the day

- 1) 11/16
- 2) 11/17
- 3) 11/17 11/18, 11/19, 11/20
- 4) 11/19
- 5) 11/19, 11/20

W_1	s_1	1	2
W_2	s_2	2	
W_3	s_3	2	
W_4	s_4	3	
W_5	s_5	5	5

	s_0	
$W_1 \rightarrow$	s_1	$s_0 - W_1$
$s_1 \rightarrow$	W_1	s_1
$W_2 \rightarrow$	s_1	$s_0 - W_1 + s_1$
$s_2 \rightarrow$	W_2	s_2
$W_3 \rightarrow$	s_2	$s_0 - W_1 + s_1 - W_2$
$s_3 \rightarrow$	W_3	s_3
$W_4 \rightarrow$	s_3	$s_0 - W_1 + s_1 - W_2 + s_3$
$s_4 \rightarrow$	W_4	$-W_3$
$W_5 \rightarrow$	s_4	$+s_4$
$s_5 \rightarrow$	W_5	$-W_4$
	s_5	$s_0 - W_1 + s_1 - W_2 + s_3 - W_3 + s_4 - W_4 + s_5 - W_5$





APRIL						
S	M	D	M	D	F	S
—	—	—	1	2	3	4
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	—	—	—

KARFREITAG

11

April

MAI						
S	M	D	M	D	F	S
—	—	—	—	—	1	2
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Am 20.12.

- 1) evr 200²
 - a) 21.12
 - b) ec 2.
 - c) JG
 - d) 4. Jan [Januar]
- 2) evr 20²: mit h.f.
-

Am 21.12.

- 1) 20.12
 - 2) 21.12. 8 Pkt.
 - 3) 21.12.
 - 4) 21.12.
 - 5) 21.12.
 - 6) 21.12.
 - 7) 21.12.
 - 8) 21.12. [H28-x] 23) 21.12.
-

Am 22.12.

- 1) 22.12. 8 Pkt.: 1. 2. 3. 4. 5. 6. 7. 8.

- 2)

- 02
- 1) ~~g. K. S.~~
- 2) ~~K. S.~~
- 3) ~~W. S.~~
- 4) ~~et. v. a. P. S.~~
b) R. G. S.
- 5) ~~W. S.~~
- 6) ~~W. S. C. H. S. A. P. S.~~

02
1) ~~R. S. A. P. S.~~ B. S. A. $\textcircled{A} \rightarrow \textcircled{B}$

2) ~~R. S. A. P. S.~~ B. S. A. $\textcircled{A} \rightarrow \textcircled{B} \leftarrow \textcircled{C}$

A - B - C

~~P. S. A. P. S. B. S. A. P. S. A.~~

3) ~~W. S. A. P. S. A. P. S. A.~~

$S = 4 \text{ mm}$

$\frac{b}{2} + 2$

$$\delta = \frac{8s}{t^2} = 2.92 \cdot 80^2$$

04.6400

$$2560 \frac{\text{mm}}{\text{s}^2}$$

2 2,5 g

$\frac{1}{80 \text{ sec}}$

$\frac{1}{2 \text{ mm}}$

E

B B B B B B B B S S L L T T D K R R B B B B B S S L L T T D K

et 7th

$W \rightarrow W$

$W \rightarrow S$

$S \rightarrow W$

$S \rightarrow S$