Parshat Nasso

Daniel Berry

The parsha covers:

- Census to find 8580 Levite men, 30-50 years old to transport the tabernacle and its contents
- Law of how to deal with a wife suspected of having an affair with a man other than her husband; barbaric, ineffective lie detector test
- Law of Nazir: no wine, no hair cuts, no shaving, no contact with a dead body, and sin offering at the planned end of the vows
- How הָהַנִים are to bless the Israelites

The parsha covers:

- Inauguration of the altar
 - Leader of each of 12 tribes brings gifts
 - one tribe per day
 - all tribes' gifts are exactly the same
 - 12 nearly identical descriptions of one tribe's gifts
 - identical except for the name of the leader, the name of the tribe, and the name of the day

An Important Concept in Computing

When a programmer finds *n* program fragments, $f_1, f_2, ..., f_n$, that are identical except for a few, *m*, specific, easily characterized differences, ...

The programmer makes a procedure, p, whose definition, f, is the identical parts of the fragments, and each easily parameterized difference is made to be a parameter, $x_1, x_2, ..., x_m$.

Invoke the Procedure in Place of the Fragments

Each of the *n* nearly identical fragments can be replaced by an invocation of *p* with the *n* parameters, $x_1, x_2, ..., x_{m_i}$ set to the specific values that make the fragment unique.

Numbers 7:12—83 is an Example

A different color is used to show all identical instances of any fragment, ... and red is used for parameters.

And he that presented his offering the first day was Nahshon the son of Amminadab, of the tribe of Judah; and was

his offering one silver dish, the weight thereof was a hundred and thirty shekels, one silver basin of seventy shekels, after the shekel of the sanctuary; both of them full of fine flour mingled with oil for a meal-offering; one golden pan of ten shekels, full of incense; one young bullock, one ram, one he-lamb of the first year, for a burnt-offering; one male of the goats for a sin-offering; and for the sacrifice of peace-offerings, two oxen, five rams, five he-goats, five he-lambs of the first year. This was the offering of Nahshon the son of Amminadab.

On the second day Nethanel the son of Zuar, prince of Issachar, did offer: he presented for

his offering one silver dish, the weight thereof was a hundred and thirty shekels, one silver basin of seventy shekels, after the shekel of the sanctuary; both of them full of fine flour mingled with oil for a meal-offering; one golden pan of ten shekels, full of incense; one young bullock, one ram, one he-lamb of the first year, for a burnt-offering; one male of the goats for a sin-offering; and for the sacrifice of peace-offerings, two oxen, five rams, five he-goats, five he-lambs of the first year. This was the offering of Nethanel the son of Zuar.

On the third day Eliab the son of Helon, prince of the children of Zebulun: was

his offering one silver dish, the weight thereof was a hundred and thirty shekels, one silver basin of seventy shekels, after the shekel of the sanctuary; both of them full of fine flour mingled with oil for a meal-offering; one golden pan of ten shekels, full of incense; one young bullock, one ram, one he-lamb of the first year, for a burnt-offering; one male of the goats for a sin-offering; and for the sacrifice of peace-offerings, two oxen, five rams, five he-goats, five he-lambs of the first year. This was the offering of Eliab the son of Helon.

On the twelfth day Ahira the son of Enan, prince of the children of Naphtali: was

.

his offering one silver dish, the weight thereof was a hundred and thirty shekels, one silver basin of seventy shekels, after the shekel of the sanctuary; both of them full of fine flour mingled with oil for a meal-offering; one golden pan of ten shekels, full of incense; one young bullock, one ram, one he-lamb of the first year, for a burnt-offering; one male of the goats for a sin-offering; and for the sacrifice of peace-offerings, two oxen, five rams, five he-goats, five he-lambs of the first year. This was the offering of Ahira the son of Enan.

Numbers_7:12-83 =

{**procedure** offering(p: **prince**): {"his offering one silver dish, the weight thereof was a hundred and thirty shekels, one silver basin of seventy shekels, after the shekel of the sanctuary; both of them full of fine flour mingled with oil for a meal-offering; one golden pan of ten shekels, full of incense; one young bullock, one ram, one he-lamb of the first year, for a burnt-offering; one male of the goats for a sin-offering; and for the sacrifice of peace-offerings, two oxen, five rams, five he-goats, five he-lambs of the first year. This was the offering of p."}

procedure standardHeading(d:ordinalDay, p:prince, t:tribe): {"On the d day p,
prince of the children of t: was"}:

p="Nahshon the son of Amminadab"; "And he that presented his offering the first day was p, of the tribe of Judah; and was" offering (p);

p="Nethanel the son of Zuar"; "On the second day *p*, prince of Issachar, did offer: he presented for" *offering* (*p*);

p="Eliab the son of Helon"; standardHeading ("third", p, "Zebulun") offering (p);
p="Elizur the son of Shedeur"; standardHeading ("fourth", p, "Reuben") offering (p);
p="Shelumiel the son of Zurishaddai"; standardHeading ("fifth", p, "Simeon") offering (p);
p="Eliasaph the son of Deuel"; standardHeading ("sixth", p, "Gad") offering (p);
p="Elishama the son of Ammihud"; standardHeading ("seventh", p, "Ephraim") offering (p);
p="Gamaliel the son of Pedahzur"; standardHeading ("eighth", p, "Manasseh") offering (p);
p="Abidan the son of Gideoni"; standardHeading ("ninth", p, "Benjamin") offering (p);
p="Abidan the son of Ammihaddai"; standardHeading ("tenth", p, "Dan") offering (p);
p="Ahira the son of Ochran"; standardHeading ("eleventh", p, "Asher") offering (p);
p="Ahira the son of Enan"; standardHeading ("twelfth", p, "Naphtali") offering (p);

Optimizing Preparation for Torah Reading

While one would not show these procedures in a Torah scroll, they do suggest a way to practice the reading of the full parsha with the smallest number of repetitions: Practice once each:

- procedure definition
- parameter
- first day heading
- second day heading

Avoiding Over Practicing

To make sure that you practice each word that you will say the same number of times: In each round, say once, each:

- procedure definition
- parameter
- first day heading
- second day heading

Text vs Live Readings

text to read at least once	number of times it is said during a live reading
definition of offering	12
definition of standardHeading	10
each <i>p</i> parameter	24
each <i>d</i> or <i>t</i> parameter	10
first day's heading	1
second day's heading	1

The part I read:

The part about the events of the inauguration leads into the part I read which

- •gives the totals and
- •explains how Moses will hear God's voice as coming from between the כְּרוּבִים (cherubs)

Another Important Concept in Computing

The part is a good lesson in an important concept in computing:

analog

VS

• digital

numbers

Analog

- Analog
- measures
- approximate
- tolerances
- never the same when measure again

e.g., distances, areas, volumes, weights, time (both an instant (10:31:32am) and a duration (2 hours 31 minutes 15 seconds))

Digital

Digital

- counts
- exact
- exact
- repeatable

e.g., number of people in a tribe, number of tribes, number of eggs in a package

Both Kinds of Numbers in Parsha

In the summary of the gifts, there are both kinds of numbers:

analog

and

• digital

Digital Numbers

Digital numbers are *all* divisible by 12, the digital number of tribes:

- Dedication offerings:
 - -12 silver dishes
 - -12 silver basins
 - -12 golden pans

Digital Numbers, Cont'd

Digital numbers are *all* divisible by 12, the digital number of tribes, cont'd:

- Burnt offerings:
 - -12 bullocks
 - -12 he-lambs, each w/meal offering
- Sin offerings:
 - -12 he-goats

Digital Numbers, cont'd

Digital numbers are *all* divisible by 12, the digital number of tribes, cont'd:

- Peace offerings:
 - -24 (12 X 2) bullocks
 - -60 (12 X 5) he-lambs
 - -60 (12 X 5) he-goats

Analog Numbers

Analog numbers are *all* weights (in sheqels) and happen NOT to be divisible by 12:

- 130 sheqels per silver dish
- 70 sheqels silver basin

200 sheqels per silver dish + basin

• 10 sheqels per golden pan

By chance, nothing analog is divisible by 12

Digital X Analog

Note that here, a "digital X analog" is digital:

- 2400 (12 X 200) sheqels total of silver vessels
- 120 (12 X 10) sheqels total of golden pans

They probably calculate the total weight by multiplying the weight of one by 12 and not by measuring the whole pile.

Conclusion

So, again, ...

we see that ...

God is a programmer and is aware of computer science concepts!

Parshat Nasso

Daniel Berry