

Ludvig Sylow: A Paean

[. . . In the other case,
 G has a unique Sylow-2 subgroup,
Meaning G is not simple.
QED]

Quite easily done.
But it isn't so easily done for you, dear Ludvig.
Born in the dead of winter in Oslo,
Nine siblings to follow by the time you are sixteen –
An age several of them will not reach.
Do they make you so diffident?

Maybe mathematics is your sanctuary,
A quiet space amidst a group of such order.
And so you teach, which
Of course
Is a calling most high –
But it is not your calling,
Yearning as you do to uncover, to connect, to weave.

In the third of your forty-two high school years,
You uncover unknown results of Abel.
You want to show them to the world,
Fittingly, shining a light upon another.
But your paper is rejected – a jealous referee
Unwilling to admit Abel had been there first.

They say you can't keep discipline in your classroom,
As if education is the military, your students soldiers of math.
But they must remind you, in these early days, of your siblings.
Do you ever see your lost brothers in them?

In the sixth of your forty-two high school years,
You work, so briefly, at University –
Appointed by a friend who had started a girls' school;
A friend devoted to the mathematically ignored
Such as you.
And you shine, and you show Lie the way.
But the moment is fleeting.
And when, in the thirteenth of your forty-two high school years,
A permanent position appears,

No one cares about finite subgroups
And you are not even considered.

You summer at Kongsvoll, ancient mountain station
Built for pilgrims,
To nourish and shelter on the long road from Oslo to Trondheim.
Kongsvoll, with its twisted mountain history of landslides, and fire.
But these summers it nourishes and shelters you too,
As you walk your own pilgrimage
From wherever you are
To wherever you need to be.

And in the sixteenth of your forty-two high school years,
They appear.
Your theorems, your silky velvet cords
Onto which we will string the beads of group theory
For a century.
Three elegant strands,
A mere ten pages to state and prove.

Do your young students know how you have laid the path for us?
Their eccentric, distracted teacher;
Maybe you seem lonely to them.
Forty-two long Norwegian winters –
Probably, you teach your students' children's children.

Eventually, your forty-two high school years
Must end,
As these things do –
With you in a full-time position at University.
The prize that has so eluded you,
Now, at age 65, is yours.
(Of course you are paid half the salary due a university professor –
How much can forty-two high school years be worth, really?)

But I thank you, dear Ludvig,
For your velvet theorems,
Spun from the silk
Of your forty-two high school years.
Your theorems, with which, on my qualifying examination
I proved the following statement:

[No group of order 96 is simple.
Proof: Let G be a group of order 96.
Then G has Sylow-2 and Sylow-3 subgroups . . .]