

# **Smith's Invention (1980) by Dan Senn** for 'cello and fixed media

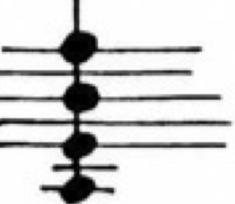
Smith's Invention was commissioned and first performed by Nelson Cooke in August of 1980 at the Canberra School of Music, Australia. Its title was derived from the inventor Graham Calder-Smith upon whose 'experimental' cello the work was first performed. The stereo tape was realized in the Electronic Music Studios of the CSOM on a Fairlight Computer Music Instrument.

## **Notation**

Boxed in areas contain notation or words which describe the sounds to be performed over the given period of time. The symbols do not represent a one to one relation to the amount or density of sound to be performed but merely represent a picture of the sound environment with general reference to the mix, sequence, change and density of events.

 Hit body of instrument with fleshy part of front fingers.

 Snap body of instrument with finger nail.

 Bow on top of bridge.

 Hit back of instrument with backhand fingers/nails.

 Hit body of instrument with flattened front fingers.

1.

0:30

12"

**d: 80**

Romantically expressive, with vibrato

Brief silence

0:45

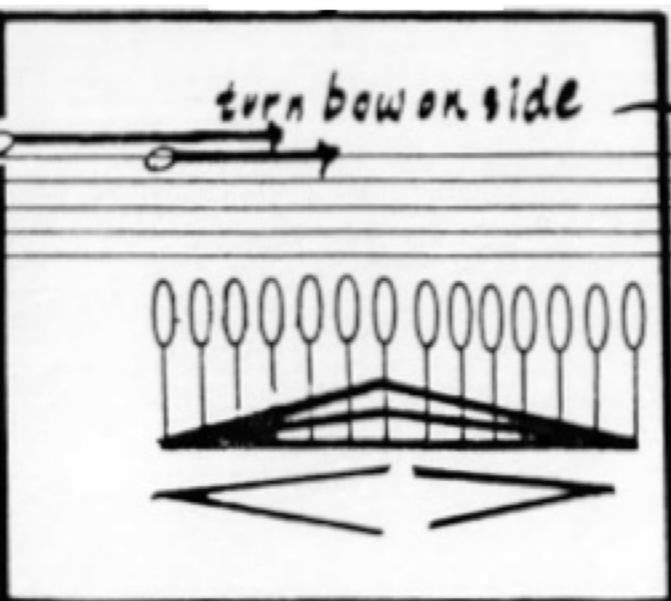
1:10

8"

1:22

12"

**d: 80**



1:44

1:54

2:02

**d: 110**

gliss. to bridge

Gradually add tremolo while moving bow atop bridge.

gliss. to bridge

Gradually add tremolo while adding open A-string & moving over fingerboard.

gliss. to bridge

Gradually add tremolo while moving bow atop bridge.

Brief silence

2.

2:10

2:10

mf *ff* → over bridge → normal → faster → slower (as before)

*4"*

suddenly fast → slower → *r.s.*  
move gradually overbridge ..... *ppp*

2:50

*d = 180*

Brief pause

Jerky, slightly wavering out of tune

(sawing wood!) long strokes → (becoming rhythmically inaccurate) short strokes

*ff* → *pp*

Ritard

## 3.

3:25

*Gradually accellerate to as fast as possible.*

*Wait for 8 beat cue continuing on the 9th beat at the same rate.*

*OK to play over 8 beat cue.*

*over finger board*

*over bridge*

♩ = 88

*slightly faster**f like sawing wood**Gradually accellerate to as fast as possible.**over bridge*

ci 4:10

ci 90"

ci 5:40

Maintain velocity. Bow over and above bridge at random while moving left hand up and down strings bringing out harmonics. Gradually replace left hand effect with low density plucking of open strings. Gradually replace right hand effect with low density plucking of strings beneath bridge using fingernail. Merge all of this with next notated section.

*pizz.*

4.

gradually accelerate to  $d=120$  by last beats of this page.

A handwritten musical score for a string instrument, likely cello or bass. The score consists of three staves of music. The first staff begins with a dynamic of  $p$ , followed by  $pizz.$ ,  $arco$ ,  $pizz.$ ,  $3$ ,  $pizz.$ ,  $3$ ,  $arco$ ,  $pizz.$ , and  $arco$ . The second staff begins with  $pizz.$ . The third staff begins with  $arco$ . The score includes performance instructions such as "gradually accelerate to  $d=120$  by last beats of this page." and "d=120". The music features various note heads, stems, and rests, with some notes having horizontal dashes through them.

## 5.

*The live 'cello sounds will be nearly masked by the recorded sounds at their loudest point on this page.*

*Gradually ritard to  $\text{d} = 60$  over this page.*

*Sul G Norm.*

$\text{d} = 60$

*Loop until final recorded pitched phrase and then continue.*

*ci 8:00*

*End on G string. While bowing, slowly loosen string until...  
...sound disappears.*