

Theater Sound Design

Time is of the essence
Actually, Time IS the essence

- Sound can only be experienced in the flow of time – there is no way to describe or experience sound absent the passage of time.
- All other design areas in Theater can use visual means to describe their intention, a scenic model, costume rendering, a painting or photo to describe the intention for a lighting cue.

- Sound is the one design area that does not get to control the “background”.
 - Noisy physical plants (HVAC, Inadequate isolation, Mechanical Systems)
 - Acting-Units
 - Lighting Equipment (%&\$**@ Fans!!)
 - Scene-Changes
 - Audience Reactions

So, what does a Sound Designer *DO* ?

- In the best case, the SD creates an aural environment that transports the audience into the world of the play.
- The Landscape is an artistic rendition of the entirety of the visual field from some individual perspective. The “Soundscape” is the aural equivalent. Sound Designers create Soundscapes.

The Functions of Sound in the Theater

- Audibility
- Motivation (Environmental ambience)
- Music
- Vocal Alteration
- Vocal Substitution
- Extension of dramatic space/time
- Mood

- Audibility:

- Making all aspects of a production fully audible to all members of the audience. (Not the exclusive responsibility of the Sound Designer)
- Increasingly, reinforcement of voice required
 - Overcoming poor acoustical environment
 - Audience expectation of “film-like” levels
 - Graying of the audience
 - Performers lack vocal training
 - Even younger audience developing hearing impairment

● Motivation

- All sounds within dramatic environment must fit that environment
- Sounds must come from the right place
- Sounds must appear appropriate to the character of the imagined source

- Music:

- Incidental

- Neither called for by playwright nor indicated in script as vital to production, but sets mood for an act or scene (pre-show, intermission, bridge between scenes, “tags” for scenes or acts, reinforcing mood of final lines/actions)

- Underscore

- Music beneath action and dialog that reinforces emotional impact – sometimes called “cinematic underscore”.

- Integral

- Music called for directly by playwright, or performed as part of the action by actors or musicians on stage

● Vocal Alteration and Substitution

- Modifying actors voice for dramatic purpose
 - Character transformation
 - Setting location (i.e. modifying reverberant signature of voice in space)
 - Indication of dream sequence or passage of time
 - Revealed thoughts
 - Asides or narration sequences (i.e. reading a journal to themselves)
- Substitution of one voice for another – Actor on stage seems to be speaking with “another voice”

- Extension of dramatic space/time
 - Use of sounds to refer to events outside the physical space and/or time frame of the dramatic action
 - Use of well known sound to trigger associations with other time or place and circumstance
 - Sounds used to disorient or distract audience

● Mood

- Manipulation of all the other functions to enhance the mood and emotional character of a play.
- Sometimes, this is deliberately used as counterpoint – one creates an expectation with sound that enhances the impact of an event on stage

Historical Perspective

- Earliest known “events” used sound effects and underscoring. Theater in China and India in the Bronze Age (4000-2000 B.C.E.) had little in the way of scenery or props, but was always accompanied and underscored by music and sound
- Medieval Drama was a “proving ground” for many conventions and devices that became common in theater of the Italian and English Renaissance.
- Commedia dell’ arte employed musical support as well as sound effects to actions – for instance the “slap-stick”
- Shakespeare’ s plays involved heavy use of off-stage sound. (famously, the wadding from a sound effect cannon is blamed for starting one of the fires that destroyed the Globe Theatre)

Historical Perspective

- During Restoration, Neoclassical, and Romantic periods, offstage sound and music went in and out of style. Sets and costumes and props became more lavish, and lights began to be more adjustable.
- Realism presented the play as a “scientific slice of life” – Stanislavsky’s 1898 production of Chekhov’s *The Seagull* at the Peoples Art Theatre (later the Moscow Art Theatre) made heavy use of sound and lighting effects. From a description of the beginning of the play – “*Darkness, an August evening. The dim light of a lantern on top of a lamp post, distant sounds of a drunkard’s song, distant howling of a dog, the croaking of frogs, the creak of a landrail, the slow tolling of a distant church-bell...Flashes of lightning, faint rumbling of thunder in the distance.*”
- In London in the 1920’s productions began to appear which used extensive sound effects, or “noises off”. One in particular, *The Ghost Train*” is notable for its description of the equipment and process used to create the sound of the train.

Historical Perspective

- Ghost Train Sound Props List (for ONE effect):
 - 1 tubular bell (E flat)
 - 1 garden roller propelled over bevel-edged struts screwed to stage, 30 inches apart
 - 1 18 gallon galvanized iron tank
 - 1 thunder sheet
 - Air cylinders (2)
 - 1 bass rope drum and a pair of sticks
 - 2 side-drums
 - 1 small padded mallet
 - 1 medium mallet
 - 1 large padded mallet
 - 1 wire-drum brush
 - 1 milk-churn
 - 1 pea-whistle
 - 1 (mouth) train whistle
 - 1 whistle for air cylinder (screwed into nozzle of air cylinder)

Historical Perspective

- Ghost Train Crew:
 - 1 man on Whistle Air Cylinder (A)
 - 1 man stands by roller (B)
 - 1 man stands by tank with large padded mallet (C)
 - 1 man stands by thunder sheet (D)
 - 2 men stand by motors (E)
 - 2 men stand by flood arcs with slides focused on exterior windows (F)
 - 1 man stands by with wire brush and small side drum (G)
 - 1 man stands by bass drum (H)
 - Stage Manager stands by with mouth whistle
 - (OK, that's 11 people backstage waiting the "Go" – not counting the ones who need to operate the curtain and the fly system!)

Historical Perspective

- The Gramophone record and electronic amplification were a welcome development!
- The Panatrope, or disc replay unit with calibrated tone arms appeared in the 40' s and held the stage until the late 50' s and early 60' s when tape came along.

Bishop Sound Panatrobe



Bishop Sound Panatrobe Traveling Version



Bishop Sound Panatrophe Calibrated Tone-Arm System



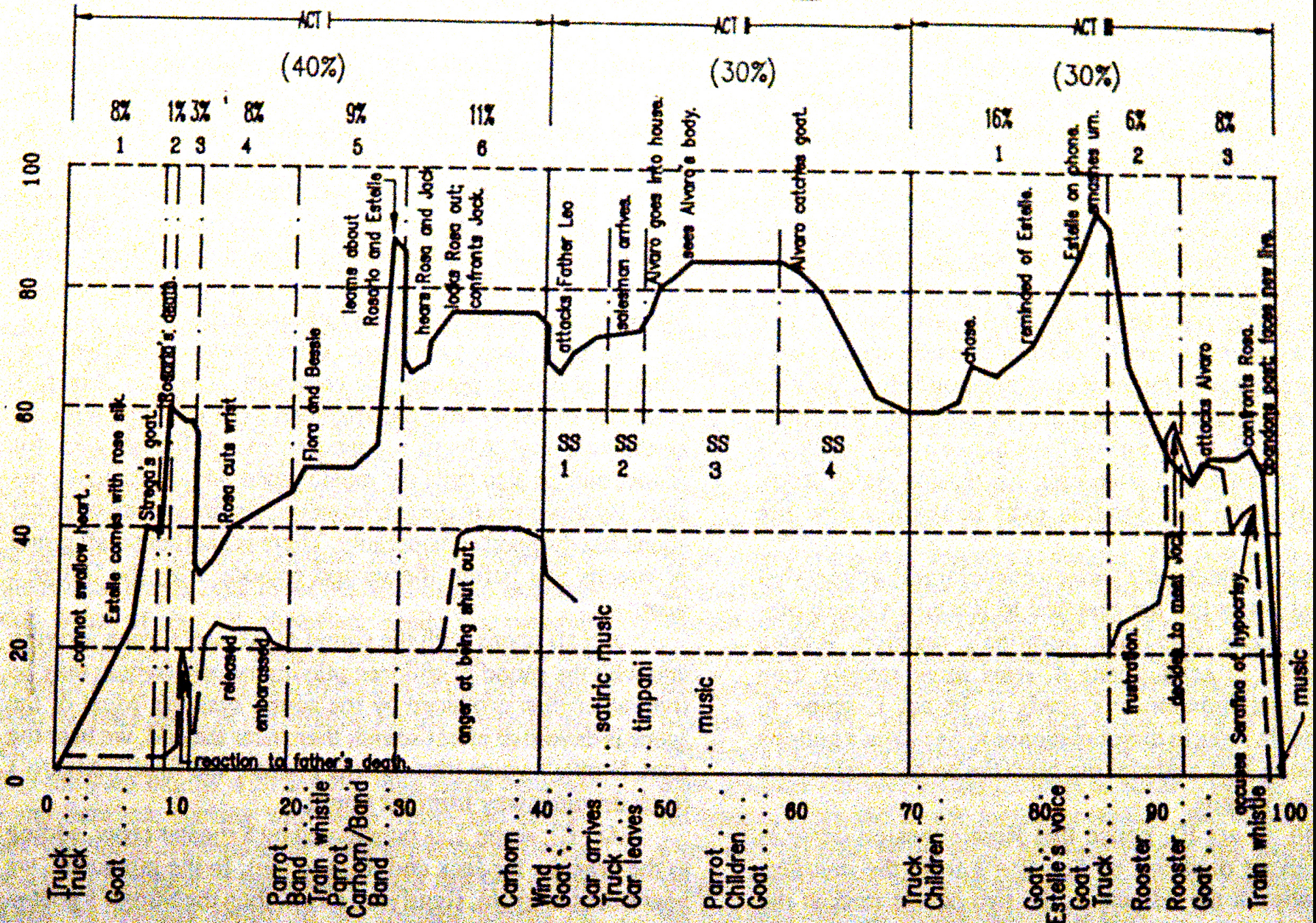
Historical Perspective

- By the late 50's, tape was in common use. Panatropes were still used because they were cheaper to rent, and they offered more flexibility.
 - With Panatrope, you had a separate amplifier for each turntable, allowing individual placement of effects speakers
 - Each cue was on separate media, so it could be changed in order, repeated easily, and moved from place to place by playing on a different turntable.
 - Tape decks were expensive, and once you recorded a sequence to tape, you couldn't immediately rearrange the sequence without re-recording, or taking the time to splice tape – so it couldn't happen in a rehearsal
 - Current digital media have only recently returned the level of flexibility available in the early 50's with 78rpm disc based SFX playback!
- In the UK, David Collison was the first person to be identified in a listing as a “Sound Designer”. That appears to have happened in the late 60's, though he was listed as a “Sound Director” as early as 1959.
- In the US, it appears Dan Dugan (yes, the guy who makes the fabulous automatic mixers) was the first to be listed as a Sound Designer, for work he did at ACT in San Francisco in their 1968-69 season.
- Bob Kernan was given the credit “Sound by Bob Kernan” on *Hair* on Broadway in that same year.
- Abe Jacob was the first to get “sound designer” billing on Broadway, for *Jesus Christ Superstar* in 1971.

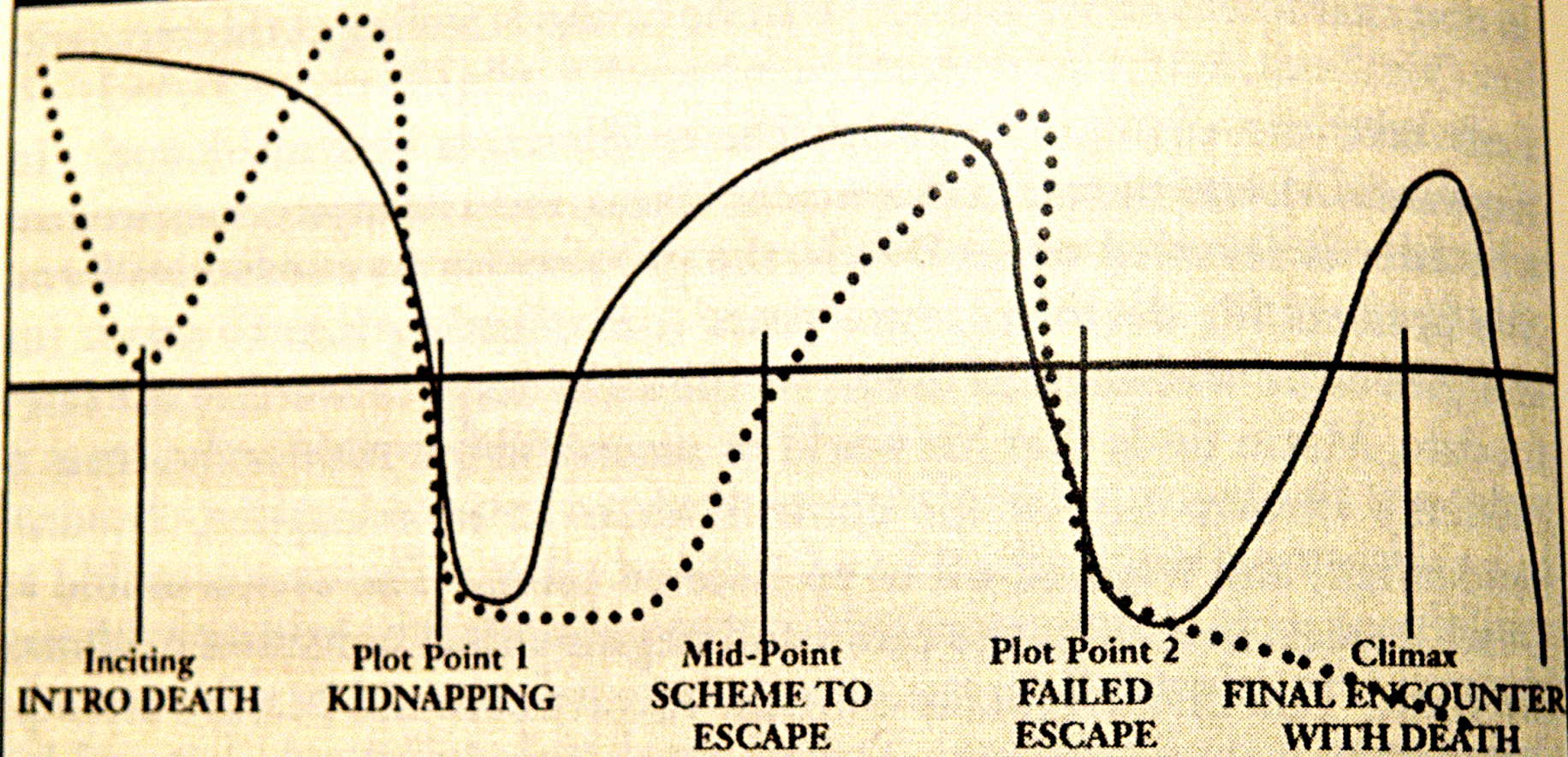
The Sound Designers' Process

- Script Analysis & Research
 - Initial Reading – read aloud if possible – avoid taking notes on fx called out in script – try to read for the story.
 - Research: need to know about the time period in which the play was written, and the time in which it is initially set. Prepare self to imagine the aural environment in which it occurs.
 - Second & third reading – begin to note specific called-for FX, begin to listen for mood, environment, potential underscore points.
 - Scene Breakdown – prepare detailed list of what happens – what each character is doing, what they want, what they get. Note all listed sounds, implied sounds, and potential for texture and substance of the soundscape.
 - Prepare Tension Curve or visual map (when appropriate)

FIG. 22-2: MARKER SOUNDS ADDED TO TENSION CURVE

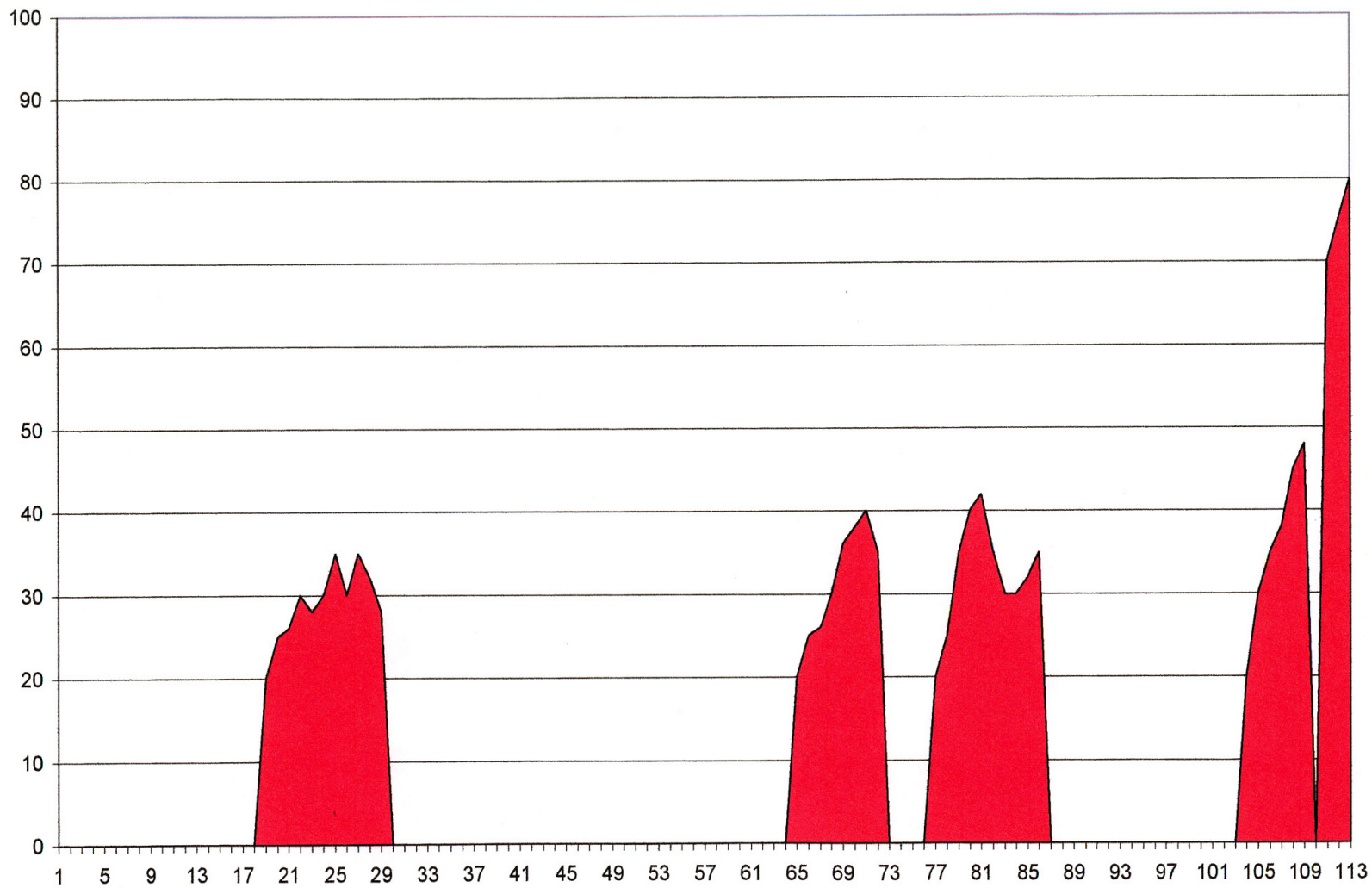


POWER

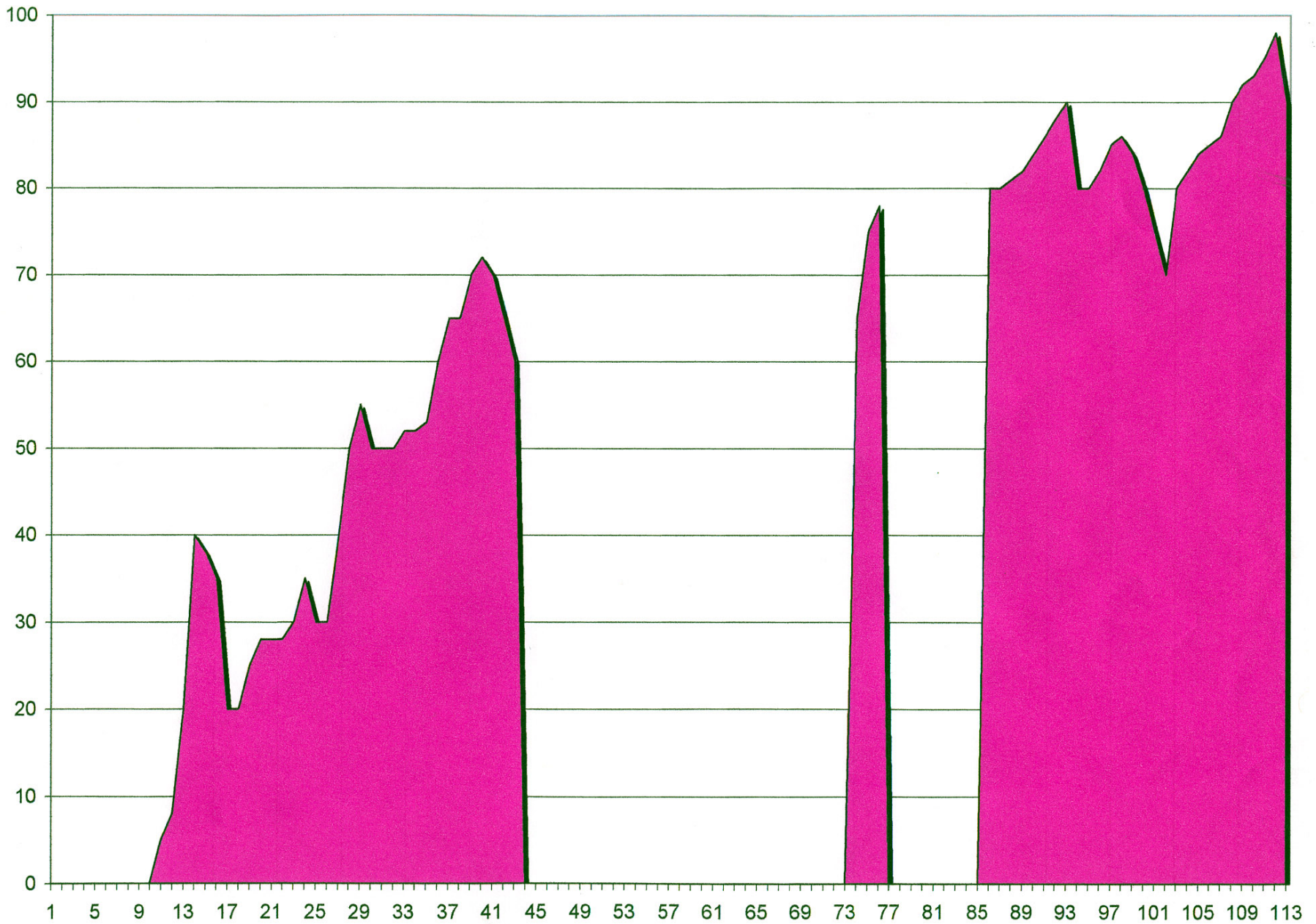


WEAKNESS

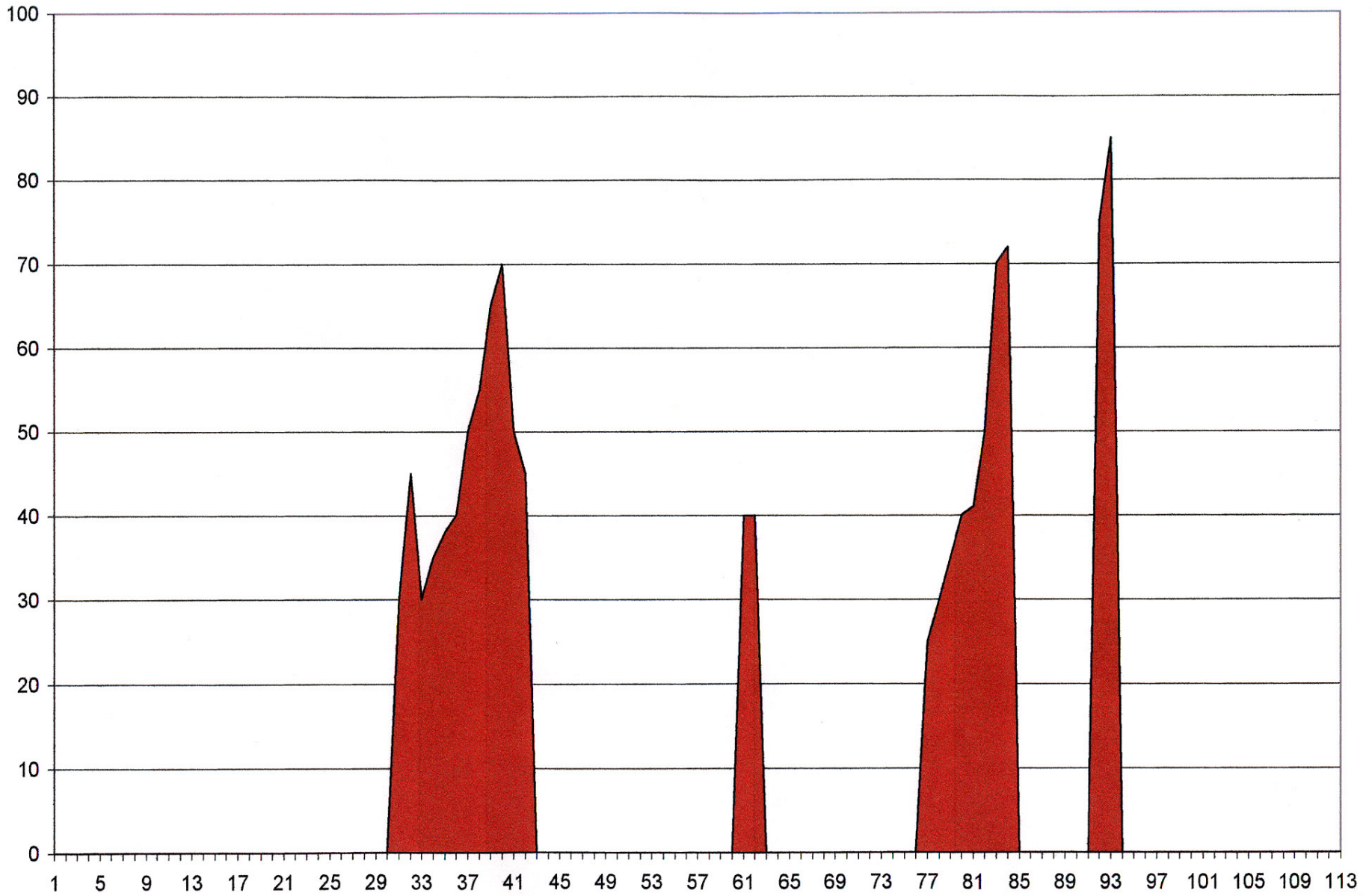
Tension Curve (Helen)



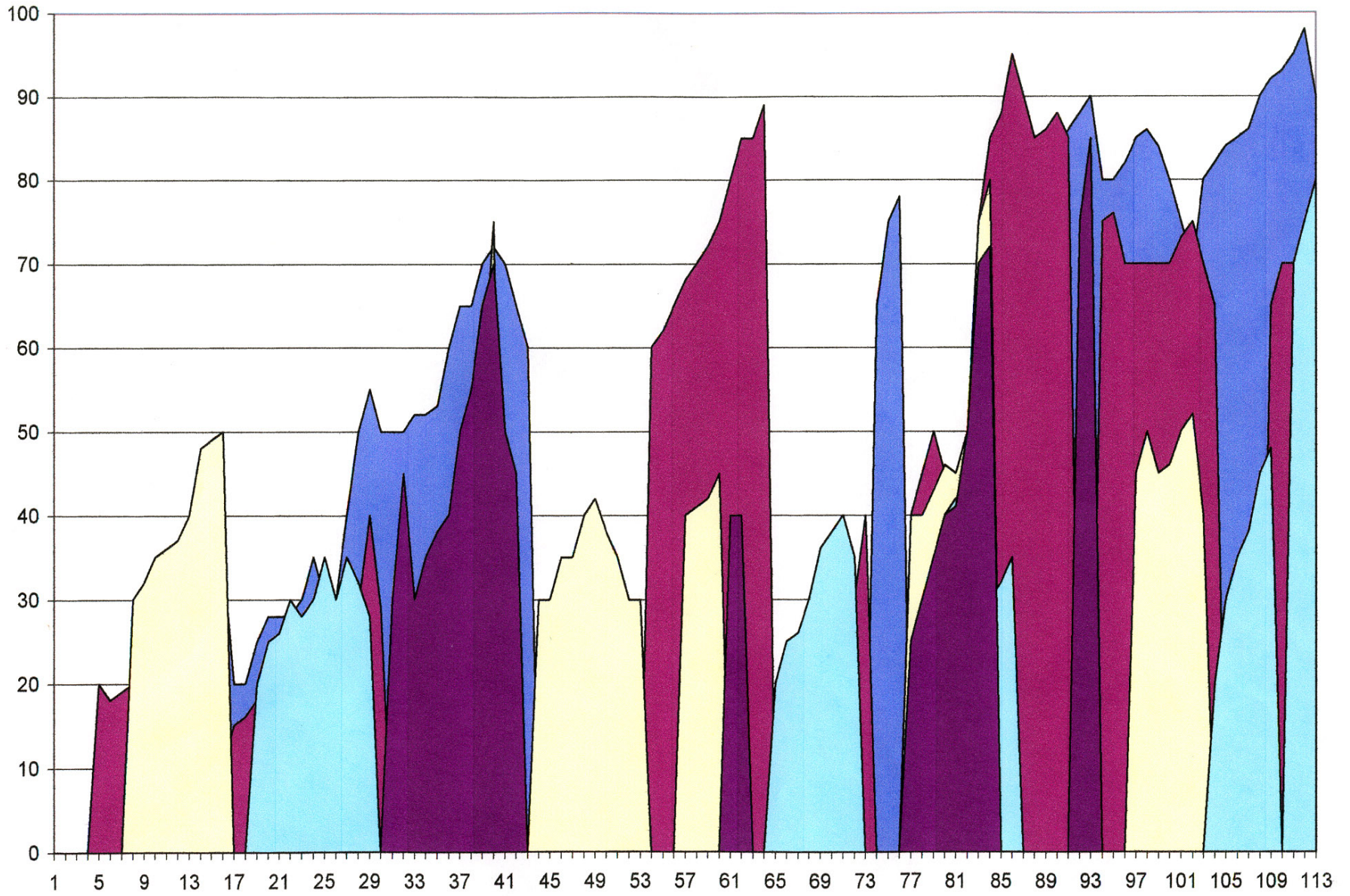
Tension Curve (Billy)



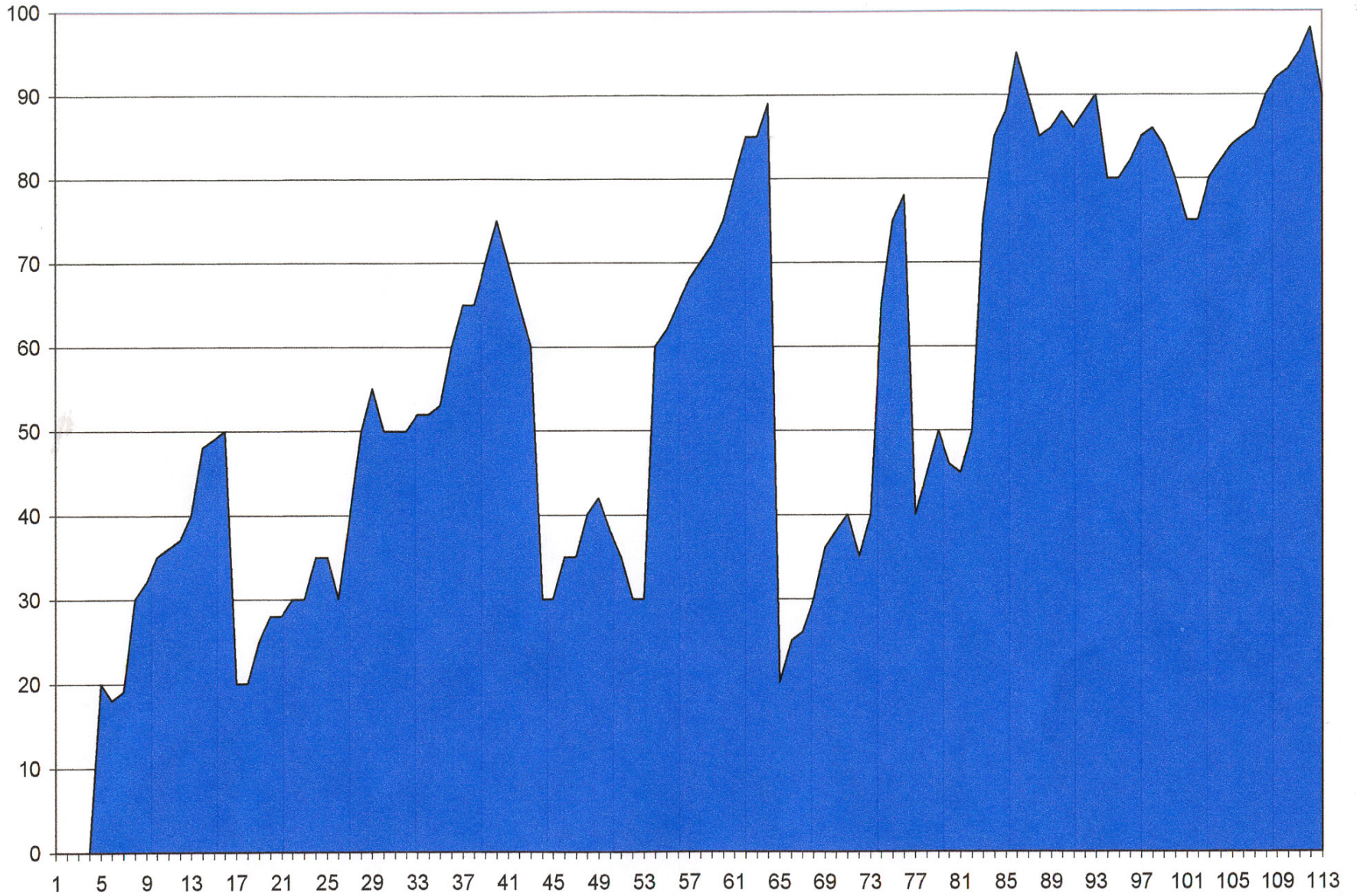
Tension Curve (Bobby)



Tension Curve (Combined)



Tension Curve Combined



The Sound Designers' Process

- Collaboration with Director and Designers
 - Prepare Sound Collage for first meeting with director.
 - Meet with director to talk about play and discover working style/process likely to ensue.
 - Directors' Pencil Style – director already has a list of music and specific ideas about FX, and may or may not be open to real design participation.
 - “I don't know what I like, but I'll tell you when you are wrong” style – Oy!
 - “I don't know nuffin about no Sound” style – director professes ignorance, DANGER Will Robinson! May actually be stealth version of the last type!
 - “Make it fluffy” style – Ouch. Ouch. Ouch.
 - “Specific ideas, but open to real collaboration style” Ahhhh.

The Sound Designers' Process

- Rehearsal and Cue Building
 - Huge amount of what you need to know is only apparent in actors' rehearsals. You have to hear their voices as early as possible!
 - Ideal is to be part of rehearsal process on regular basis. Problem is, nobody wants to pay you to do that.
 - Getting rehearsal sound cues into play as early as possible enhances possibility that they will remain in show. Directors cut FX and music before any other element because they are often afraid you can't fix them.
 - First time you play a cue in rehearsal is crucial – be there if possible.
 - Edit, edit, edit, edit.
 - Tech rehearsals give you extra editing time while the lighting designer takes hours to build cues.

Cue	Scene	Page	Description	Call	Location					
					Up L	Up R	FOH L	FOH R	BOH L	BoH R
1			Preshow	House Open			x	x	x	x
2			Final Pre-Show	Timed TBD						
3			Collapse music to scratchy and old	With house to half and out	x	x	x	x	x	x
4			Envrionmental	In black	x	x	x	x	x	x
5			Environment moves onstage	With lights rise	x	x				
6			Tea Kettle	TBD after room establishes	x					
7			Envrionment Fades under	long fade with Kate's entrance	x	x				
8	1	9	Swell outdoors noise	Open of Door for Johny	x					
9	1	9	Lower noise	Door Close	x					
10	1	11	Swell outdoors noise	Billy entrance door opening	x					
11	1	11	Lower noise	Door Close	x					
12	1	16	Swell outdoors noise	Johnny's return	x					
13	1	16	Scene Change	With Lights	x	x	x	x		
14	2	17	Scene Change fade	Open scene	x	x	x	x		
15	2	19	Swell outdoors noise	Helen's Entrance	x					
16	2	19	Lower noise	with door close	x					
17	2	27	Swell outdoors noise	Bartleys escape	x					
18	2	27	Lower noise	door close	x					
19	2	29	Swell outdoors noise	Helen's Exit	x					
20	2	29	Lower noise	Door Close	x					
21	2	30	Scene Change ?	Billy's "Aye"	x	x	x	x		
22	3	31	Cross to Shore environment	Transition point			x	x	x	x
23	3	31	Fade Environment lower	For dialog - TBD			x	x	x	x
24	3	32	Swell Sea slightly	Bobby's "...answer Johnny PM"			x	x		
25	3	33	Shuffle of stones - sea lower	Bobby's "...fecking eej."		x	x	x		
26	3	37	Swell sea noises	Bobby reads letter TBD			x	x		
27	3	37	sneak sea back down	As Bobby finishes letter			x	x		
28	3	42	Swell sea noises	Bobby's "I'm sorry"			x	x	x	x
29	3	43	Bible splash	Visual with Bible trajectory					x	x
30	3	43	Scene Change Music	With Lights	x	x	x	x		
31	4	44	Fade SC add environment? (rain?)	With Lights, scene start	x	x	x	x		
32	4	53	Scene Change Music	with lights	x	x	x	x		
33	5		Tea Kettle again?	before Eileen's entrance	x					
34	5	57	Outside Noise - cold wind/rain?	with Door on JP entrance	x					

Cue	Scene	Page	Description	Call	Location					
					Up L	Up R	FOH L	FOH R	BOH L	BoH R
35	5	57	Lower noise	Door Close	x					
36	5	60	Outside Noise - cold wind/rain?	JP exit door opens	x					
37	5	60	Lower noise	Door Close	x					
38	5	61	Outside Noise - cold wind/rain?	Bobby entrance	x					
39	5	61	Lower noise	Door Close	x					
40	5	62	Outside Noise - cold wind/rain?	Bobby exit	x					
41	5	62	Lower noise	Door Close	x					
42	5	64	Swell wind/rain	Eileen's "...see C.B. again."	x	x	x	x	x	x
43	5	64	Intermission Music	Pause after Black			x	x	x	x
44			Entre' Act	With house to half and out			x	x	x	x
45			Move music onto stage	In black	x	x				
46	6	65	transition to environment	with lights	x	x				
47	6	65	spring outside noises swell	Helen opens door	x					
48	6	65	Lower noise	Door Close	x					
49	6	72	spring outside noises swell	Helen opens door	x					
50	6	73	Lower noise	Helen's final exit	x					
51	6	73	End Scene/Scene Change	Bartley smashes the eggs	x	x	x	x		
52	7	74	Hollywood traffic noise	with lights transition into scene	x	x				
53	7	74	Tragic Music	leads into Billy's lines	x	x	x	x		
54	7	74	Sneak music level down	For dialog - TBD	x	x	x	x		
55	7	76	Traffic swells, morphs to sea, wind, island noises	Scene Change	x	x	x	x		
56	8	77	Cross to Man of Aaran film	With scene start and lights/proj	x	x			x	x
57	8	77	fade film sound down	For dialog - TBD	x	x			x	x
58	8	85	End of film flapping reel	with end of film	x	x				
59	8	93	Happy Transition Music -	With Billy's screams	x	x	x	x		
60	9	94	Shop environment maybe rain?	Scene opens - Eileen with door open	x					
61	9	97	Swell outdoors noise	Johnny's entrance at door	x					
62	9	97	Lower noise	Door Close	x					
63	9	100	Swell outdoors noise	Doctors exit	x					
64	9	100	Lower noise	Door Close	x					
65	9		Tea kettle	TBD Someplace before Eileens return		x				
66	9	104	Swell outdoors noise	Johnny's exit	x					
67	9	104	Lower noise	Door Close	x					
68	9	104	Swell outdoors noise	Helen's entrance	x					
69	9	104	Lower noise	Door Close	x					

Update:10/6/2003

Cripple of Inishmaan Sound Cues

Cue List 1.xls

Cue	Scene	Page	Description	Call	Location						
					Up L	Up R	FOH L	FOH R	BOH L	BoH R	
70	9	104	Swell outdoors noise	Helen's Exit	x						
71	9	104	Lower noise	Door Close	x						
72	9	109	Billy's coughs in back?	Live or memorex?-		x					
73	9	111	Mournful music	Billys prep for suicide	x	x					
74	9	111	Fade/end of music swell outside	Helen's Return	x	x					
75	9	113	Happier music starts	Helen's exit	x	x					
76	9	113	Music cuts off	Billy's final coughs	x	x					
77	9	113	Reverbed sound for Cough	Sneak mic in for billy's coughs			x	x	x	x	
78	9	113	Final Mournful Music	as lights go down and billy shuffles off	x	x	x	x	x	x	
79	9	113	Swell music for Curtain	On Call			x	x	x	x	
80	9	113	Fade music down for audience exit	End of Curtain Call			x	x	x	x	

The Sound Designers' Process

- Tech & Dress Rehearsals
 - Probably 90% of actual cue work happens here.
 - Everything is different when the actors move into the stage. Suddenly, scene changes take longer, are louder, and need covering sound.
 - Every scene change cue will change length continuously throughout rehearsal.
 - Designers (all of them) need to haunt director during rehearsal – time to ask questions is in the moment, not later during notes.

Toys and Tricks

Let's play with some stuff!