stage with a view whose restriction varies with the scenery design; important and nonimportant levers are grouped together and this is bad. The masters are repeated in the producer's box at the back of the auditorium. Large amount of lighting equipment can slide along special tracks on the fly-rail. Specially made portable towers 16' to 18' with access ladders.

Sound control cabin with elaborate input and output patching. This has been placed foh. . .seems to me that it is more important for light control to occupy this position if space is restricted.

Workshop and scene docks fantastic. Paint shop has galleries suspended from the ceiling so that painters can look at their work from a distance as it lies on the ground. Seems to me that there are too many uncoordinated control desks in flys, wings, understage etc. The lack of performance coordination suggests too much departmental independence.

DON GIOVANNI

This is the production that opened the theatre. Watched partly from stage and partly from production box in auditorium. One person giving light cues over a microphone from score while lighting director talks to bridge and tower operators by radio. The coordination between lights and scenery extraordinarily bad: like Hamburg there are master faders in the production box but, like Hamburg, they don't use them. This is quite beyond me. In Anna's aria before the supper scene there was disaster. In setting up the lighting behind the cloth, the operator also changed over the foh, getting blackout plus two strange blue shapes. It took all of 20 seconds to restore the light. Not surprised that this happened because the layout of the master desk is very bad, without easy differentiation of levers. Relatively insignificant ones are mixed up with important ones. Many of the stage pictures were lovely although frequently spoiled by staircases which were Festival of Britain/Coffee Bar rather than Mozart/Spain/Da Ponte.

For a newly opened opera house this is a technical marvel but I do not feel that the whole technical problem has been approached from the right angle: performance control. No doubt it will all settle down in six months.

VIENNA STAATSOPER

Toured theatre and watched part of Carmelites from stage and switchboard, a Bordoni on the PS perch, arranged on grandmaster principles facing stage with master control at onstage end from where chief operator has an excellent view. The Bordoni has about 280 circuit levers which can be individually locked on (manually). Manual stops can be preset to levels but the cue is motor driven. Watching a simple fade to blackout at the end of one scene and come up on the next scene, I noticed that 5 men were required. The control perch also has the clockface dials and motor controls for the remotely driven spots on the upstage bars, used principally for backlighting. Interesting assortment of lanterns from many sources including Kliegels, Patt 23s, Reiche & Vogel and the Viennese manufacturer Pani who started by making special designs for the Staatsoper, including very interesting low voltage mirror spots. Had a good solid 2-hour discussion with Dr Rotter, the Chief Engineer. He has many theories on switchboards and has examined most of the systems. This helped to clear my mind on a number of points.

Interested to find how afraid he was of electromechanical systems. He feels that Bordoni (for which he has great affection) has now been replaced by the magnetic amplifier and will ultimately be replaced by the SCR, but not yet.

NURNBERG SCHAUSPIELHAUS

New Siemens installation in 1000 seat drama theatre converted from a cinema by addition of stage tower. No elaborate stage but large docks for truck storage. Standard Siemens mag-amp system in foh box. Experimental SCR dimmers in use on a couple of circuits.

NURNBERG OPERNHAUS

Old theatre adjacent to Schauspielhaus and run in conjunction. Work in progress to replace Bordoni with mag-amps during next summer recess. Dimmer room being formed under stage with deep cabling channels included in the concrete. Pleasant theatre—noted that while rehearsing it is very useful to raise orchestra pit lift so that pianist and conductor can be in touch with the stage (a facility available in Britain, as far as I know, only in Glasgow Alhambra and Manchester Opera House).

FÜRTH STADTTHEATER

Delightful old multi-boxed small theatre. The Nurnberg company give about 4 performances a week (opera, operetta, ballet and plays), some transferred from Nurnberg and some like this performance of 'Albert Herring' specially produced for Fürth because it requires an intimate theatre. Production not nearly as bad as Britten fears when his operas come under German producers. Orchestra in period costumes and bowler hats. Promptress sat in OP box in costume and was so hissingly audible that I was thankful to be on the PS side of the stalls. Simple sets against a black surround. Lighting rough open whites but quite effective in a primitive sort of way. I wonder if we sometimes try to be too smooth in our lighting. Singing not very accurate but some characterisation good. Whole evening spoiled musically by sluggish tempi. I know Herring fairly well from my English Opera Group days and some bits were for a moment unrecognisable due to strange interpretation. Went to bed wishing that Glyndebourne would (a) commission a new opera from Britten and (b) try to persuade him to relax his rule of conducting Mozart only at Aldeburgh.

SIEMENS AT ERLANGEN

Research department of Siemens Theatre Lighting Division. In the demonstration theatre I was shown a somewhat horrible sequence of light cues to music (a sort of dusk/night/storm/dawn sequence performed on cut-out scenery against a cyc). They apologised for this in advance, saying that they were not artists but electro-technicians: I find this a wrong attitude. . . . how can they design a control desk if they do not bear in mind artistic performance requirements? Saw the magnetic amplifier dimmers and was able to test, personally, their load independence from 15w to 5kW. I think that there can be little doubt that the Siemens Magnetic Amplifier is the finest dimmer on the world market today. It occupies the position which the Bordoni transformer held until 5 or 6 years ago. But, and it is a large BUT, I am not at all happy with the system of control in their installations, ie the use of an electro-magnetic clutch lever. One of the great advantages of an all-electrical system is that you can not only

eliminate moving parts but can have proportional dimming. It seems to me that if you are going to have clutches it is better to do as Strand do and put the clutches at the dimmer and not the desk.

I had a long argument on this point with the Siemens engineers but found that one cannot really talk to them in terms of the needs of stage lighting control. They are thoroughly committed to this piece of engineering. I was told that whereas my professionally trained eye could detect the difference between proportional and non-proportional fades, the audience could not. I asked whether they could make a desk to our requirements to operate their magnetic amplifiers. They said this was impossible as their factory was geared to standard production. They said that Mannheim would convince me that their system was the best. . .and anyway, they said, look at all the theatres that are satisfied with our equipment. This was rather an impasse because it is rather difficult to tell them that what may be good enough for Berlin, Salzburg, Prague, Copenhagen, Stockholm, Sydney and the Bolshoi not necessarily be right may for Glyndebourne.

I should perhaps add that my discussions with Siemens, in spite of the above account, were friendly and amicable! I had a particularly nice lunch with Herr Kolbe, the Chief of the Theatre Department. We agreed as to the supremacy of the magnetic amplifier (with the reservation on my part that it might be necessary for financial reasons in non-statesubsidised theatres to use a simpler transductor dimmer for the fixed load circuits). We agreed about the unsuitability of thyratrons (from an efficiency and expense point of view, although at the purely laboratory level they have possibly the best performance characteristic.) He said that Siemens would not launch SCR for at least 2 years as they had not solved the problem of current surges.

MUNICH CUVILLIESTHEATER

Delicious theatre but perhaps a teeny bit too clean and sparkling. Chandeliers go out of sightlines on motor winches as they fade. Enjoyable performance of 'Seraglio'. As expected, lighting troubles due to the difficulty of finding places for lanterns in such an auditorium. Mainly from top centre above principal box and therefore very flat. However the production deliberately kept actors upstage. Lighting in general rather rough: good ideas, good sculpting, but individual lanterns needed tidying up. A couple of sheets of frost would have worked wonders. Blues particularly primitive in the last act.

SALZBURG LANDESTHEATER

Theatre recently decorated and very pleasant indeed and intimate. 'Der Vogelhandler'. Singing positively evil but orchestra playing rather good. Chorus were not trying (they had already sung a matinee of the same piece) and were completely inaudible. A permanent set with changes contrived with simple flown pieces of little imagination. Lighting coarse but plastic-itching to tidy it up with a few scraps of frost, but in doing so I expect I would have lost its individual quality. Usual soft-edge following from the bridge: pity that the spot used had a badly adjusted mirror which contrived to give actors a halo when they stood against a flat. Also this spot had a very nasty filament striation. This may all sound depressing but there were some jolly good tunes.