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MEASURING NOISE: REACHING AN OPTIMAL JUDICIAL POLICY

*Alon Rosenthal**

I. Introduction

Because of the diminutive size and relatively intense urbanization of the country, noise has always constituted one of the more serious environmental problems with which the Israeli legislature and courts must contend. Indeed, in a recent survey conducted by the Israeli Environmental Protection Service, (E.P.S.) 52.5% of Israelis questioned indicated that the major deficiency of their environment was the prevalence of noise, as opposed to only 3.7% who complained of unpleasant air or odours.¹ Regulations have been enacted specifying the manner in which noise is to be measured and providing standards for the existence of nuisances. Recently, the court has been faced on several occasions with the question of whether violation of such regulations is necessary for an action seeking to establish a given noise as a nuisance.² Although no definitive rule has been established, the Supreme Court, in confirming a lower court decision in *Israel Electric Co. Ltd. v. Farsht*,³ began what we hope will be a continuing process in determining a clear and optimal judicial policy regarding the measuring of noise and the use of these calculations in nuisance cases.

This article will attempt to review some of the essential considerations and

* B.A. (U. of North Carolina, Chapel Hill); Third year student, Faculty of Law, The Hebrew University of Jerusalem.

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¹ *Environmental Quality in Israel, 1981*, Yearly Report No. 9, Ben Yeshaya, (ed.), (E.P.S., Jerusalem, 1982, in Hebrew) 166.

² Such a restrictive policy, although never endorsed by the Israeli courts, has been accepted in other systems. See *McCuiston v. Addressograph-Multigraph Corp.* 29 S.E. 2d 490 N.C. Ct. App. (1982) where as recently as 1982 a North Carolina Court of Appeals found that under N.C. Workers Compensation Statute, "a claimant must prove he was exposed to 90 decibels of noise before he can recover compensation."

³ *Israel Electric Co. Ltd. v. Farsht et al.*, Cr. A. 151/84 (Dec. 13, 1984, unpublished). On file with author and at office of legal advisor, E.P.S., Jerusalem. For the facts of the case see text at *infra* n. 35.

difficulties in the formulation of an optimal Israeli judicial policy regarding the measuring of noise. Our study begins with an overview of Israeli legal efforts to regulate noise pollution with a particular emphasis on the *Farsht* Court's decision, which rejected the exclusive nature of noise regulations. We will observe some of the intrinsic limitations of acoustic noise measurements and the difficulties they pose in the formulation of a model set of standards which alone would bind the court. Finally, after pointing out the potential dangers of too flexible a judicial policy which would in effect deprive noise regulations of some of their more important functions, we will suggest a balance which would enable the measurement of noise to fulfil its desirable role in the legal regulation of noise.

II. *Israeli Primary and Secondary Legislation Regulating Noise*

Until 1961, statutory mention of noise could only be found in a very general prohibition of "creating a public commotion" or "the making of a loud noise . . . in a place and in circumstances that disturb others" in the Penal Code⁴ and the even broader provisions regarding nuisances in secs. 42-48 of the Civil Wrongs Ordinance.⁵ This, along with the rather paltry provisions of sundry local bye-laws, did little to combat the prodigious growth of noise in the rapidly developing country. In 1961, however, the Knesset enacted the Abatement of Nuisances Law (often called the Kanovitch Law after the enthusiastic member of Knesset who proposed the legislation). The law which very generally prohibits unreasonable polluting in any form, states in sec. 2:

A person shall not cause any considerable or unreasonable noise, from any source whatsoever, if the same disturbs, or is likely to disturb, a person being in the vicinity or the passersby.⁶

The law also authorizes the Minister of the Interior "by regulations" to "make rules for the implementation of secs. 2-4 and they may, *inter alia*, define what is considerable or unreasonable noise, smell or pollution of the air".⁷ Sec. 8 goes further in allowing the Ministers to issue personal directives to individuals to take steps to prevent contravention of secs. 2, 3, and 4.

⁴ The Criminal Code Ordinance, 1936, sec. 102(1), 189, superceded by the Penal Law, 1977 (L.S.I. Special Volume, 1977).

⁵ The Civil Wrongs Ordinance (New Version), (2 L.S.I. [N.V.] 5, particularly sec. 44 at 17).

⁶ Abatement of Nuisances Law, 1961, sec. 2 (15 L.S.I. 52).

⁷ To date 11 sets of regulations have been promulgated by the Ministers of Interior

The role of regulations issued by the Ministers receives very general treatment in the Law itself. Sec. 10(1) states:

In any judicial proceeding under this Law, a nuisance defined as considerable or unreasonable by the regulations under sec. 5 shall, so long as the contrary has not been proved, be presumed to be likely to disturb a person being in the vicinity.

Sec. 10 (2) continues: "It shall be a good defence that the accused or defendant has fulfilled every obligation imposed on him by directions issued under sec. 8". These provisions make a clear dichotomy between two elements of the prohibition in sec. 2 to which we shall refer as the objective and subjective elements. Objective elements include definitions and standards generally scientific in nature, as stated in the regulations. Subjective elements recognized in the circumstances that would, according to sec. 10(1), not constitute an act "likely to disturb a person being in the vicinity", are not specified.⁸

Although the Ministers issued regulations in 1966 which forbid certain noisy activities at certain hours (i.e., yelling, singing, turning on radios outdoors, etc.) it took a full sixteen years for regulations to be passed defining "unreasonable noise". This delay was distressing to certain concerned elements of the Israeli public and was the subject of legal battles, ultimately resulting in a Supreme Court decision ordering the Ministers to promulgate more specific regulations.⁹ Despite the obvious inadequacies of the law during this time, it was utilized on several occasions by citizens to combat noise pollution in court.¹⁰

and Health. The original version of the Law authorized both the Minister of the Interior and the Minister of Health to issue regulations. The government, however, later cancelled the latter's authority in a decision that, in accordance with sec. 17(A) of the Basic Law: the Government, was approved by the Knesset. See *Yalkut HaPirsumim* (II) p. 1736 (May 4th, 1982).

⁸ The courts have been strangely silent in interpreting this paragraph, although as we will argue, it can be a very important provision.

⁹ See *Oppenheimer v. Minister of Interior*, (1965) 20 P.D. 309 and *Peranio v. Minister of Health*, (1972) 26(i) P.D. 809 vis-à-vis promulgation of ambient air standards. For further discussion of the law and regulations also see Kretzmer, "Judicial Conservatism v. Economic Liberalism: Anatomy of a Nuisance Case" (1978) 13 Is. L. R. 298 at 313-315.

¹⁰ Amongst others: *Kanovitch v. The Civil Air Supervisor*, (1973) 26(i) P.D. 309; *Ata Textile Co. v. Schwartz* (1976) 30(iii) P.D. 785 and *The Soldier's Welfare Committee v. Weiner*, (1966) 51 P.M. 257.

A. *The Regulations of 1977*

The Regulations for the Abatement of Nuisances (Abatement of Noise), 1977 (hereinafter the 1977 Regulations) were perhaps the single most important legislative step in the field, greatly enhancing the efficacy of the Kanovitch Law vis-à-vis noise pollution.¹¹ The second regulation defines unreasonable noise as "permanent or changing noise whose duration and measured level exceed the level specified in one of the appended charts". This chart provides standards for noise in decibels according to three major categories: the nature of the neighbourhood, the time of day, and the duration of the noise. Hence in an industrial area a noise may reach up to 100 decibels during the day if its duration is no longer than 2 minutes, while in a strictly residential neighbourhood at night, noise may not exceed the 45 dB. level at such a duration.¹²

The manner in which the measurements are to be taken is very clearly specified in the regulations including such provisions as distance of the meter from the floor, the state of the windows, etc. Those sources of noise to which the regulations do not apply are worthy of mention; sec. 9 excludes planes and motor vehicles. These exceptions were made because of their distinct nature and at the request of the Department of Transportation which at the time expressed a desire to regulate these areas.¹³ In short, the regulations determine a system for measuring noise inside buildings and set a legal context for the results vis-à-vis the prohibition of considerable or unreasonable noise in the Abatement of Nuisances Law.

Other regulations regarding noise have been enacted, although they are not as extensive as the 1977 Regulations. The Regulations for the Abatement of Nuisances (Unreasonable Noise from Construction Equipment), 1979,¹⁴

¹¹ Nuisance Abatement Regulations (Unreasonable Noise), 1977, *K.T.*, no. 365, p. 716.

Despite certain scholars contentions that the Abatement of Nuisances Law is the "quintessential non-enforced statute", the record does not bear this out. With the issuing of the Regulations, local units of the Environmental Protection Service (E.P.S.) began responding to individual complaints of industrial and commercial violators. Noise measurements are taken and in the event that they exceed the decibel limit, reports are sent to the sources, informing them of their violations. The general results have been surprisingly successful proving that a law's efficacy need not be measured by the number of court actions based on its provisions. In 1981, 1255 such complaints were answered in the Tel Aviv area alone. See *Environmental Quality in Israel*, *supra* n. 1 at 184.

¹² Nuisance Abatement Regulations, *ibid.* at Second Appendix.

¹³ Background Information from the Study Day for Local Inspectors, Abatement of Nuisances Law, 1961 and Regulations for Unreasonable Noise: (Ministry of Interior, 1977, in Hebrew).

¹⁴ *K.T.* no. 3922, p. 1394. Significantly these regulations only refer to imported

also a highly technical set of standards for construction equipment, affect a particular source of noise but were intended to serve only as a performance or emissions standard and not to set a general ambient level like the 1977 Regulations. In addition, the Traffic Regulations, 1961¹⁵ set a standard comparable to that of the EEC for new automobiles, but as the problem of noise pollution from mobile sources is often one of old vehicles, and the regulations do not provide continuous standards, their impact is limited.

III. *The Abatement of Nuisances Regulations and the Courts*

A. *Air Pollution Regulations*

The prohibition of unreasonable air pollution in the Abatement of Nuisances Law is also enforced by regulations issued according to sec. 5. The role of these regulations in the court helps to illuminate the general attitude of the courts towards the Abatement of Nuisances regulations. Indeed, in reaching decisions on nuisance cases involving noise, the courts have used examples and arguments from regulations regarding air pollution cases. Cases involving application of scientific measurement of air pollution are, therefore, very relevant to our study.

The first instance concerning the role of the air pollution regulations in the enforcement of the Kanovitch Law arose in the 1969 decision, *Israel Electric Co. Ltd. v. Avishar*.¹⁶ A Tel-Aviv District Court granted an injunction primarily based on sec. 13 of the Abatement of Nuisances Law which regards any contravention of "this law" as tantamount to the existence of a nuisance in the Civil Wrongs Ordinance.¹⁷ Initial discussion involved the 6 km. distance from the source of the pollution to the plaintiff's house and whether this deprived him of standing. However, the second contention of the defendant is of greater interest, since the Ministers of the Interior and of Health had already issued regulations according to the Abatement of Nuisances Law, the action could not succeed unless it was proven that the

vehicles and do not apply to vehicles assembled in Israel. Also there is nothing in the regulations to prevent the disassembling of anti-noise apparatus such as mufflers.

¹⁵ K.T. no. 3663, p. 908.

¹⁶ (1969) 33(ii) P.D. 315.

¹⁷ For a discussion regarding the Abatement of Nuisances Law's application in the framework of Israeli Tort Law, see Kretzmer, *Nuisances in The Law of Civil Wrongs: The Particular Torts*, G. Tedeschi, (ed.), (Faculty of Law, Hebrew University, Jerusalem, 1980, in Hebrew).

appellant violated these regulations. The court held that "these regulations do not cover every source of air pollution from smoke of all kinds".¹⁸

The subject of the air pollution regulations was the "emission of black smoke", while the primary pollutant emitted by the power plant was SO₂ which is not included in the definitions and standards for black smoke. The court held that despite the absence of appropriate regulations, the plaintiff was still entitled to the injunction. "Therefore at least at this early stage, there is nothing to prevent the respondents from using the general provisions of sec. 4 of the Kanovitch Law itself regarding considerable or unreasonable pollution of the air".¹⁹

In a more recent decision, *Miyuchas v. State of Israel*,²⁰ the non-restrictive nature of the air pollution regulations was upheld by the Supreme Court. In this case the appellant had been convicted in the Jerusalem District Court of driving an Egged bus that emitted dense black smoke which remained visible for 100 sq. meters. Although charged with violation of sec. 155 of the Transportation Regulations,²¹ the question arose as to whether convictions for illegal emissions were dependant on a violation of the Abatement of Nuisances (Air Pollution from Motor Vehicles) Regulations, 1963.²² The District Court remanded the case to the lower court ruling that violations of sec. 155 of the Transportation Ordinances could only be proven by application of the standards in the regulations. In reversing the District Court decision, Levin J. wrote: "Sec. 15 of the Abatement of Nuisances Law is intended to add to the provisions of all laws and not to derogate from them. The restrictive interpretation suggested by the defendant's attorney (which sees the regulation as the sole means of showing a violation) is not acceptable".²³

Following this decision, the ability to convict the driver of a motor vehicle for emissions violations without the tests prescribed in the Abatement of Nuisances Regulations was upheld in *Dan Union of Public Transportation v. State of Israel*.²⁴ Here a bus driver was charged with a misdemeanor of illegal exhaust emissions in violation of secs. 53 and 54 of the Public Health Ordinance.²⁵ The situation was complicated by the existence of two different

¹⁸ *Israel Electric Co. Ltd. v. Avishar*, *supra* n. 16 at 319.

¹⁹ *Id.*

²⁰ (1981) 35(iv) P.D., 741.

²¹ K.T. no. 2501, p. 699: "No one shall drive a vehicle or park it in a road if the vehicle emits gasses, smoke, oil or petroleum material in a manner that exceed the regular emissions from a vehicle of this type or in a manner likely to cause a disturbance to a passerby or to endanger safety."

²² K.T. no. 1506, p. 92.

²³ *Miyuchas v. State of Israel*, *supra* n. 20 at 743.

²⁴ (1983) 100(a) P.M. 150.

²⁵ 34 L.S.I. 8.

exhaust tests which separate laws accept as valid for the determination of unreasonable pollution.²⁶ The court commented on the undesirable and confusing nature of independent systems of measurements existing side by side and mentioned in an *obiter dictum* the use of regulations as evidence for the defence: "Had the defendant proved that he was not in violation of the 1963 regulations it stands to reason that he should be found innocent because it is part of the definition of sec. 53 (14) [of the Public Health Ordinance]".²⁷ We find such an unequivocal position at odds with the spirit of the *Miyuchas* decision, and with the courts' position in the field of noise regulations.

Clearly the value of any analogy between the use of noise and air pollution regulations will be limited. The unique and complex nature of noise measurements is the subject of this paper. Nevertheless it is worthy of note that in instances where the regulations did not clearly specify a pollutant to be unreasonable or where scientific measurement was not possible, air polluters were convicted without the aid of existing regulations, establishing their non-restrictive nature.

B. *Noise Regulations*

Specific mention of the role of noise measurements in judicial policy can be found in three recent cases. The case of *Odem v. Mayor of Tel-Aviv*²⁸ is not specifically related to the regulations *per se*, but rather its relevance lies in reflecting the general attitude of the court vis-à-vis the measurement of noise. *Odem* appealed to the High Court of Justice to order the Mayor of Tel-Aviv to renew a licence for his coffee-house. The mayor claimed that the coffee-house disturbed not only residents in its building but was also the source of complaints from apartment dwellers in the general vicinity. When the local E.P.S. Unit found that the noise from *Odem's* customers exceeded the 40-50 decibel level specified in the 1977 Regulations, the mayor determined that the coffee-house disturbed the quality of life and therefore a Tel-Aviv bye-law empowered him to refuse the request for renewal.²⁹

²⁶ See sec. 2, Noise Abatement Regulations (Pollution from Vehicles) *supra*, and Public Health Regulations (Pollution Emissions from Motor Vehicles), 1980 K.T. no. 4106, p. 1244. The former stipulates use of the "Hatridge" test while the latter introduces the "Ringelmann" test. The confusion is caused by the Public Health Ordinance originally defining unreasonable air pollution by the Abatement of Nuisance Regulations, while much later on the Ministry of Health issued other regulations by the authority granted by the same Ordinance. This authority overlaps with that of the Minister of the Interior under the Kanovitch Law.

²⁷ *Dan Union of Public Transportation v. State of Israel*, *supra* n. 24 at 156.

²⁸ (1981) 35(ii) P.D. 122.

²⁹ Tel-Aviv Bye-Law (Preservation of Streets), 1979, K.T. no. 4019, p. 1772.

Barak J., in granting the order, held that "quality of life", although a legitimate consideration, cannot be the only one. A balance between these interests and those of the coffee-house owner obligates the consideration of other factors such as the nature of, and expectations involved in, renewing licences as opposed to the granting of a new one. Also the mayor must consider the substantial expense undertaken by Odem to improve the situation. However, the main thrust of the decision involved the noise measurements upon which the mayor based his decision.³⁰

The coffee-house was situated on the very crowded Ibn Gvirol street which, according to evidence presented by the petitioner, had a background noise level at night of 66-84 decibels (depending on the type of vehicles passing). Because the coffee-house customers' conversations averaged only between 52-55 dB., the court held that this noise was swallowed up by the more powerful background noise of the street. Hence the court ruled that no meaningful disturbance of the quality of life had been proven and that the city must grant Odem a licence.³¹ The court's failure to consider the quality of the noise from the coffee-house will be discussed at a later stage of this article. It is notable though that in the eyes of the court, an admitted violation of the 1977 Regulations did not in and of itself constitute a disturbance. In this case the particular location of the source of noise was the dominant factor in the determination of whether noise disturbed the quality of life and not the actual decibel level. This confirmation of the relative nature of noise is consonant with other decisions in the field.

In *State of Israel v. Bnei Atarot* residents of a Moshav (agricultural community) requested a declarative decision that the construction of a new runway at Ben Gurion International Airport would constitute a nuisance.³² Among the arguments posed by the State was that which claimed that since the 1977 Regulations did not apply to noise from air traffic, the Abatement of Nuisances Law itself must not apply as well. Avnor J. rejected such an interpretation: "Reg. 9 determined only that the definitions regarding the extent of noise would not affect airplanes". Although agreeing that one of the ramifications of such a position is that Israeli law has no standards for

³⁰ As more cities enact bye-laws which set decibel levels for expected noise, the role of measurements will play an increasing role in administrative law and licensing cases.

³¹ *Odem v. Mayor of Tel-Aviv*, *supra* n. 28 at 127. This decision involved licensing and theoretically should in no way affect local residents' claims in a nuisance action.

³² (1980) 95(b) P.M. 441. This case has been appealed in the Supreme Court, which overturned the decision of the District Court regarding the State's liability. The lower court's holdings on noise measurement, however, were unquestioned. (The Supreme Court's decision is as yet unpublished.)

defining unreasonable noise from airplanes, such a conclusion does not affect the scope of the Abatement of Nuisances Law. As was determined in the *Oppenheimer* case,³³ and according to judicial policy until 1977, in the absence of definitions "the reasonableness will be determined from time to time".

In continuing her discussion, Avnor J. suggests what is the beginning of a cogent judicial policy regarding noise regulations.

If a nuisance is determined as considerable or unreasonable according to the regulations, then the burden of proof falls on the defendant to prove that he is not causing the disturbance to people found in the vicinity. But if there is no provision in the regulations, then the plaintiff must prove that the noise is unreasonable.³⁴

Although not mentioning the provisions of sec. 10 of the Kanovitch Law directly, it can be assumed that for the first time the court attempted to apply its approach to the judicial role of standards. We will return again to this "burden of proof" framework and extend its application further on.

By far the court's most extensive discussion of the role of noise regulations and measurements can be found in *Farsht v. Israel Electric Co. Ltd.*³⁵ On May 26, 1980, between the hours of 1:00–6:00 a.m. residents of a northern Tel-Aviv neighbourhood were awakened by a very loud noise emanating from the Reading Power Station located in the area. Consequently Farsht and residents of a neighbouring street, together with the Council for the Prevention of Noise and Air Pollution in Israel, filed a private criminal complaint against the Israel Electric Company operators of the plant. The complaint charged them with violation of sec. 2 of the Abatement of Nuisances Law. The Magistrate's Court, in granting an acquittal, accepted the defendants argument that since the prosecution did not include among the evidence presented any measurements according to the 1977 Regulations, no *prima facie* case against the accused proving the existence of considerable or unreasonable noise was made. The Tel-Aviv District Court reversed the decision, ruling that the absence of measurements did not preclude proving a noise nuisance and that, in fact, the

³³ *Oppenheimer v. Minister of Interior*, *supra* n. 9 at 332.

³⁴ *State of Israel v. Bnei Atarot*, *supra* n. 32 at 449. Significantly the court did not determine whether compliance with the regulations automatically cleared a defendant or whether it only shifted the burden of proof. The *Farsht* decision, however, chooses the latter route.

³⁵ *Farsht v. Israel Electric Co. Ltd.*, Cr. App. (T.A.) 1622/82, unpublished. (D. Tel Aviv, Nov. 11, 1983). On file with author and at office of legal advisor, E.P.S., Jerusalem.

existence of a nuisance had been established. The Supreme Court confirmed the District Court decision and remanded the case to the Magistrate's Court for the defence to present its evidence. The court's decision, although touching upon many aspects of the role of measurements and regulations did not treat the subject as extensively as the District Court's opinion. Hence in our review of the case we will also give attention to the holdings of the lower court.

1) *The Role and Wording of the Regulations*

The central contention of the Elcetric Co. was simply that with their promulgation, the 1977 Regulations became the sole means of establishing a noise as a nuisance. In her decision Strassberg-Cohen J. relied heavily on the aforementioned *Oppenheimer* decision in which the court called for the enactment of the regulations in question. Landau J.'s opinion is cited where he states:

Without such regulations the citizens can try his luck on the basis of secs. 2, 3 and 4 [of the Abatement of Nuisances Law]... in any case these are an addition and are likely to make it easier for the private citizen, beyond the easing based on shifting the burden of proof.³⁶

The court held that the original intent of the regulations was to provide an additional aid to those seeking to establish the existence of a nuisance.

Another sign of the regulations' non-exclusive intent relates to the scope of their provisions. Although the 1977 Regulations specifically exempt air traffic from the standards, the Kanovitch Law is applicable to aircraft "with the court determining standards of reasonableness from time to time".³⁷

The absurd ramifications of such an interpretation are mentioned in both Strassberg-Cohen J. and Bejski J.'s concurring opinion as the final reason for rejecting the appellant's position.

It is inconceivable that the same public which the law wishes to protect by means of regulations will be obliged to move about with measuring devices in their pockets and with the knowledge and skill appropriate to conduct the complicated tests in the manner determined by the regulations.³⁸

³⁶ *Supra* n. 3 at 3, and see *Oppenheimer*, *supra* n. 9 at 333.

³⁷ *Id.* at 4. See example of Abatement of Nuisances Law applied to aircraft in *Bnei Atarot*, *supra* n. 32. The District Court in its decision (p. 11) cites the promulgation of other noise regulations in 1979 as further proof that the regulations were not intended to be exhaustive.

³⁸ *Id.* at 7 and per Bejski at 14.

Bejski J. asks rhetorically: "Should we maintain that a resident of a distant settlement cannot enforce the law just because he doesn't have a measuring device in his possession and he has no possibility of inviting a professional who has one?"

In conclusion, both decisions held that the regulations' standards for measurement were an "evidential tool" for both defence and prosecution. These allowed either side to establish a presumption as to whether or not the law has been violated. "In no way should it be deduced that this evidential tool is exclusive and there exists no other means without it".³⁹

The District Court was also faced with the question whether, as the Magistrate's Court held, the wording of the regulations was restrictive.⁴⁰ The Second Regulation reads: "For matters of this law, unreasonable noise is. . ." The respondent claimed that since the regulations were not worded: "Noise of this type or nature will be unreasonable" but rather chose the former wording, clearly indicated that the Minister intended the definition to be an exhaustive one. The court did not see any significance in such an alteration of the wording and held that the current text in no way negates proving unreasonableness by other means.

2) "*Post Nuisance*" Measurement of Noise and Testimony of Experts

The Supreme Court insouciantly adopted the position of the District Court, that in fact the residents had succeeded in shifting the burden of proof and established a nuisance with the evidence they presented.⁴¹ It can therefore be understood that a stamp of legitimacy was given to the somewhat unorthodox testimony accepted in the lower court.

A unique approach to the problem of inaccessibility of noise meters was posed by one of the appellants, who, on the morning after the violation, approached the power plant with a measuring device and used his memory to determine the approximate level of the noise in his apartment on the night the nuisance occurred. He measured the level at 125 decibels, far beyond the allowable standards at night time for any neighbourhood. The court found this evidence to be admissible.⁴² "In almost every instance it is possible to prove the intensity of the noise suspected as a nuisance by measuring with a device not necessarily at the time of the nuisance's existence, rather after it". The court went further stating that even should the witness

³⁹ *Id.*, at 9.

⁴⁰ *Supra* n. 35 at 11.

⁴¹ *Supra* n. 3 at 9.

⁴² *Supra* n. 35 at 10.

forget and be unable to give an exact measurement, he is still entitled to testify that the noise was considerable or unreasonable. The court did not mention the specifications in the 1977 Regulations, but in asserting that such a "post-nuisance" measurement is acceptable, it hints at these specifications being non-restrictive in nature.

At a later point the decision rejected the respondent's argument that in the absence of measurements it was incumbent upon the court at least to have the opinions of an expert as proof, or have the judges visit the site of the violation, as had been done on occasions before 1977. As the prosecuting witness's testimony cannot be reliable, failure to take such steps leaves insufficient evidence as to the unreasonableness of the noise. The court, however, saw the testimony as reliable. The establishment of people's inability to hear each other talk outside their apartment at the time of the violation is apparent proof of the unreasonableness of the noise to which the respondent must reply.⁴³

3) *Objective and Subjective Tests of Noise*

Strassberg-Cohen J. divides the provision of sec. 2 into two parts which determine alternatively objective and subjective tests. Specifically the demand that a noise be unreasonable is to be determined by "objective standards" while the demand that a noise be disturbing or "likely to disturb" is to be a subjective test. The latter subjective test, however, "needs to be checked according to the standard of the reasonable man and not the specific sensitive one and in so doing there is an objectivization of the disturbance test".⁴⁴

The inclusion of a "reasonable man" standard into the so-called subjective test clouds what would have otherwise been a clear and logical division. In the absence of any acoustic measurement, how is the objective test different from a reasonable man approach to determining the existence of a disturbance? Despite the deficiencies in the distinction, it is clear that the court is attempting to severely mitigate subjective elements in the determination process of a nuisance. Flaws in this approach will be treated at length in section IV.

Another distinction the court attempts to make is one which focuses on the two terms "considerable" and "unreasonable" in sec. 2. Unfortunately, the Supreme Court deals even more superficially with complex and various forms of noise pollution than did the District Court. Having determined

⁴³ *Id.* at 26. In *Ata v. Schwartz*, *supra* n. 10, for example, in the absence of regulations the court based its decision on the advice of acoustic experts.

⁴⁴ *Supra* n. 3 at 5.

that the regulations were not intended to be the sole means of establishing the existence of a nuisance, the District Court held that the criterion of "power" or pure noise intensity as expressed in the 1977 Regulations decibel readings was not intended to be exclusive as well. "As it is acceptable to prove the lack of reasonableness of noise because of its loudness or power, so is it acceptable to prove it due to its type, essence, or quality".⁴⁵ As examples of such alternative unreasonable noises, HaCohen J. suggests rather bizarre instruments such as glass, water shaking, a saw (squeaking) "which are likely to project a dissonant noise which gives 'the chills' to any normal person who hears it. Such noises would be unreasonable even if they do not reach the levels of the 1977 Regulations". The District Court also held that there is no way to express in technical terms the unreasonableness of noise because of its quality or type.

The Supreme Court, however, attempts to classify noise as either "considerable" or "unreasonable". After explaining that lacking any regulations defining the word considerable, the court is bound to define it. Strassberg-Cohen J. explains that the difference is not simply semantic:

For noise can be considerable and in spite of this, reasonable, such as if it is passing or heard in a noisy area; and a noise can be weak and yet be unreasonable, such as a monotonic dripping in an environment with a quiet background. Thus it is not a coincidence that the legislature distinguished between considerable and unreasonable noise and, regarding both of them, determined that they are to be measured by the disturbance that they constitute or are likely to constitute.⁴⁶

The Supreme Court's position, unfortunately, appears obtuse and leaves two essential questions unanswered. Firstly, insofar as unreasonable noise has already been defined by decibel levels in the 1977 Regulations, what is the nature of the alternative "considerable" noise? The court's example of a weak dripping noise which does not constitute considerable noise suggests a strictly decibel/strength criterion as well. The court's distinction is inadequate, for it ignores the role of the definition of the 1977 Regulations of unreasonable noise.

Secondly, and of greater significance, is one to understand from the *Farsht* decision that a noise can be measured, fall short of the prohibited decibel level, and yet still be ruled a nuisance? Although it seems that the example of a weak dripping noise might in fact be ruled in violation of the law, unlike the District Court, the Supreme Court refrains from an

⁴⁵ *Supra* n. 35 at 37.

⁴⁶ *Supra* n. 3 at 7.

unequivocal clarification of the law. The silence is symptomatic of a general disregard for the many dimensions of noise. Even a superficial glance at questions of frequency as in the District Court's decision, might have provided a clearer answer as to the role of measurement in determining the existence of nuisances.

IV. *Limitations of Noise Regulations and Measurements*

Although the Israeli court's attitude toward noise measurement seems to be moving in the desirable direction of what we shall call increased flexibility regarding the role of measurements in a nuisance action, they have yet to adequately recognize some of the intrinsic qualities of noise and acoustic measurement which present difficulties in any attempt to regulate noise pollution. We will suggest three general categories of inherent problems which limit the effectiveness of regulations and therefore make a "flexible judicial policy" essential.

We perceive three fundamental types of limitations to any regulation of noise through measurements. We shall classify these as 1) unavailability of sound level meters; 2) the complex nature of sound; and 3) the diversity of victims of noise pollution or "subjective problems".

The obvious limitation of any noise regulations is amply demonstrated by the situation which arose in *Farisht*. Because noise pollution is so often the result of circumstances which are unlikely to recur, it is often impossible physically to get the meters to the location in time to measure the violation. Certainly no regulations would allow anyone to violate the standards at will, so long as he does not do so consistently. Some of the measures that deal with this problem accepted by the District Court in *Farisht* are helpful, and are a valid compensation for such limitations in some cases. However, their fundamental assumption is that the violation was gross in extent (125 versus 40 dB.) and the existence of a nuisance was hardly in question. We would suggest that there should be a proportional relationship between the degree of flexibility and the grossness of the violation or the margin of error. Be that as it may, the Supreme Court's rather extensive treatment of this limitation in *Farisht* needs little elaboration. However, although the court recognizes and even attempts to attach statutory meaning to the type or quality of the noise, it does not explore this more serious limitation in depth. A few words of a technical nature are in order if we are to understand the extent of the problem.

The Nature of Sound

Sound is produced by the vibration of air molecules and is transmitted in longitudinal wave motions. It is therefore a form of mechanical energy and is measured in energy related units.⁴⁷ Its measurement becomes problematic insofar as it is related to the human ear. The quietest sound that the human ear can detect is 20 micro-pascals (the original unit for measuring sound). The other end of the scale where pain begins is 100 pascals, "a ratio of more than a million to one".⁴⁸ As the numbers involved in using such a linear scale are so immense and unwieldy, a logarithmic scale was devised measuring sound in decibels. Therefore, a small increase in decibels can signify a large increase in sound. "While 10 decibels is ten times more intense than 1 decibel, 20 decibels is 100 times more intense".⁴⁹ Thus what may seem to be a relatively small violation of noise regulations may in fact represent an enormous increase in sound intensity.

Another significant quality of decibel measurement is its "relative nature". Kenneth H. Gifford writes:

It [noise] must not be regarded as the acoustic engineer's equivalent of linear measurements. If a length or breadth is expressed to be a number of meters, then for practical purposes that length or breadth does not change. To express a noise in decibels, however, is only to express a comparison between that particular sound pressure and the ambient sound pressure level, so that as the ambient level changes, so does the measurement expressed.⁵⁰

Zero decibels then is not tantamount to the absence of noise. Another complication arising from decibels logarithmic nature is that normal addition and subtraction are inappropriate. Two sound pressures of 60 dB. when measured together will not measure 120 dB.⁵¹

The nature of sound is further complicated by the fact that the perceived magnitude of sound is highly influenced by its frequency. Frequency measured in Herz, (cycles per second) ranges over a factor of 1,000,000.⁵² Hu-

⁴⁷ *Noise-Environmental Health Criteria 12* (World Health Organization, Geneva, 1980) at 11.

⁴⁸ Hassel and Zaveri, *Acoustic Noise Measurement* (Bruel and Kjaer, Denmark, 4th ed., 1979) at 30.

⁴⁹ Callahan, "Noise and its Measurement" (1980) *Current Mun. Problems* 70.

⁵⁰ Gifford, "Noise Control and Compensation for Noise Pollution," (1980) 54 *Australian L.J.* 408 at 411.

⁵¹ Hassel and Zaveri, *supra* n. 48 at 34.

⁵² See *Noise and Vibration Control*, C. Beranek, (ed.), (McGraw-Hill, New York, 1971) 24-26.

man beings can only hear frequencies from 20 Hz. to 20,000 Hz., or roughly from the lowest note on the pipe organ to the highest note on the violin.⁵³ Hassel and Zaveri write:

No simple relationship exists between the measured physical sound pressure level and the human perception of the same sound. The loudness of a pure tone varies with its frequency and that of a short pulse with its duration.

Research shows, for example, that a 50 dB. tone at 1000 Hz. has the same perceived "loudness level" as 73 dB. at 50 Hz., or 42 dB at 4000 Hz.⁵⁴ Also, in general, high frequency noises are considered more annoying than low ones.

As the 1977 Regulations do not specify frequency, a situation may arise where a noise with a low frequency may exceed a decibel level in the regulations, while a human being may perceive it as being much quieter and less offensive than a higher frequency noise well within the regulation's legal limits. Beyond these standard problems, it has long been established that the more random a noise, the more irritating it is.⁵⁵ Unexpected sonic booms, for example, tend to startle and disrupt more than comparable and even louder steady noises. Therefore, besides affecting the perceived level of a noise, a sound's randomness or constancy, although not particularly subject to regulation, can have a profound influence on whether or not that noise disturbs. The 1977 measures of duration do not include this factor.

The problems arising from the complexities of noise are exacerbated by problems involved in measuring it. Specifically, the accuracy of any measurement is limited by the mercurial conditions of the environment. Although reduction in noise intensity is generally achieved by simple distance, other factors significantly affect the propagation of sound. Wind velocity, temperature, gradients, humidity, and absorption by the ground surface are not constant, often making replication of a given noise's intensity impossible.⁵⁶

In addition, the accuracy of measuring devices has come under attack. A recent study showed that when several dosimeters and sound level meters were used to measure the level of a single noise source simultaneously, the dosimeters overstated noise exposure by as much as 100% when compared with the exposure measured by the sound meters.⁵⁷

⁵³ Callahan, *supra* n. 49 at 76.

⁵⁴ Hassel and Zaveri, *supra* n. 48 at 42, 46.

⁵⁵ Berland, *The Fight for Quiet*, (Prentice Hall, Engelwood Cliffs, N.J., 1970) at 46.

⁵⁶ Hassel and Zaveri, *supra* n. 48 at 21-29.

Such technical limitations of noise standards and measurements have received reasonable recognition in court decisions in the industrialized world. The Australian Court was one of the first to give expression to these problems in the literature. As early as 1963 the Supreme Court of New South Wales ruled:

We are very conscious of the difficulties which must of necessity be experienced by those of us who have had no specialized training in these matters in appreciating the abtruse scientific basis upon which the acoustic practice rests. The true criticism of his evidence which Mr. Taylor himself concedes is that instrumental recordings such as he made, do not of themselves disclose the effect of sound upon human beings . . . of itself the number of decibels recorded is incapable of reflecting the effect of the sound upon the comfort of those who come within its range.⁵⁸

Else J., for example, recognized the problematic nature of climatic instability. "It is in my view quite impossible to predicate of any noise on or near the waterfront that it will have a static quality and measurement regardless of such things as force and direction of the wind apart altogether from ambient noises from road and harbor traffic".⁵⁹ The court's position is summed up in *Pacific Moldings Co. Pty. Ltd. v. Bankstown Municipal Council*:

Such discomforts as may be experienced by individuals in the residences as a result of the existing noises is not of course a thing capable of scientific measurement, but may well be dependant on subjective factors.⁶⁰

Subjective Factors

An underlying assumption in the setting of any type of regulations is that human sensitivity to noise is more or less uniform. Such uniformity is, of course, increasingly elusive in our heterogenous society, particularly in light of the wide range of disturbances caused by excessive noise. A recent U.S. Environmental Protection Agency study confirms the deleterious effects of

1984) 10 Noise Regulations Reporter 4 (published by the Bureau of National Affairs (BNA) in Washington) as contended in brief filed with the U.S. Occupational Safety and Health Review Commission.

⁵⁸ *Farley and Lewers Ltd. v. Attorney General* (1963) W.N. N.S.W. 80 at 1709.

⁵⁹ *Howard Smith Industries Pty. Ltd. v. Leichhardt Municipal Council* (1968) 16 L.G.R.A. 348 at 352 as reported by Gifford, *supra* n. 50.

⁶⁰ (1961) W.N. N.S.W. 78 at 995.

⁵⁷ "Chocolate Manufacturers Challenge Use of Dosimeter to Measure Noise," (June

noise pollution as including: disruption and degradation of sleep and sleep quality, interference in communication patterns (whether it be in the realm of educational, familial or occupational fields), decreased efficiency and general performance including accidents, injuries and job inefficiency.⁶¹ Such a wide range of human activity is affected that clearly the reasonableness of a given noise would depend on a given individual's routine.

On a strictly physical level, noise has proven harmful to man's circulatory, reproductive and nervous system.⁶² The pernicious effects of noise depend on a particular individual's weaknesses and needs. Similarly, entire segments of the population may be more or less susceptible to a disturbance from noise pollution. If a prominent ear specialist's conclusion is true and the present generation will, by the age of 21, sustain a ten percent permanent hearing loss primarily from the noise levels at which they listen to music,⁶³ their perception of unreasonable noise may be far different from those who set the standards.

The Nebraska Supreme Court, in *Daugherty v. Ashton Feed and Grain Co.*⁶⁴ recently gave effect to this concept in holding that the noise from grain drying fans constituted a nuisance and enjoined operation of the fans on weekends and nights. The defendant's contention that the appellants were not people of ordinary sensitivities, since scientific evidence demonstrated that the noise emitted from the fans was within the limits of several cities' standards, was dismissed by the court.⁶⁵ The existence of a nuisance in Ashton, Nebraska and not an urban area was the question which the court must address, and the inability of the plaintiff to hear the telephone, the television set, or door bell was ruled adequate in demonstrating the existence of a nuisance.⁶⁶

The interesting rule emerging from *Daugherty* was the presumption that "once the plaintiff proves that the noise causes discomfort, the burden of coming forth with the evidence shifts to the defendant to show that the plaintiff is not of ordinary sensitivities". Unlike the Israeli position as expressed in *Bnei Atarot* and *Farsht*, the Court held that the evidence of average decibel levels alone does not indicate that the plaintiff is not of ordinary sensitivities.

⁶¹ Report of Second Federal Interagency Noise Effects Research Panel (Office of Noise Abatement and Control, Washington) Feb. 1978 at II-3 and II-4.

⁶² Black, "The Highway Cases: Noise as a Taking or Damaging of Property in California," (1980) 20 Santa Clara L.R. 425.

⁶³ Gifford, *supra* n. 50 at 409.

⁶⁴ *Daugherty v. Ashton Field and Grain Co. Inc.* 303 N.W. 2nd 64 Neb. (1981).

⁶⁵ *Id.*

⁶⁶ The court's position is not unlike that held by an early Israeli Supreme Court decision, *Hotel Eden v. Gerzon* (1952) 8(ii) P.D. 1131, where the defendant's

Hence the presumption that the plaintiff is of ordinary sensitivities tends to protect those elements of society with less than average tolerance for noise.⁶⁷ As the court ruled in *Farley Lewers*:⁶⁸ "Still less is it [decibel readings] capable of determining whether there has been a material interference with the standards of comfort which residents in a given locality are reasonably entitled to expect".

Given the great variety of community standards, coupled with the enormous disparity which can exist between individual sensitivities, the attempt in *Farsht* to reduce "subjective factors" to a single "reasonable man" disturbance standard is certain to lead to inequity. Such a view is based on a chimerical judicial creation which is simply not consonant with any modern nation's variegated population and needs. The court should reconsider the value of watering down its subjective tests in light of the sundry needs of its citizens.

These limitations illustrate the need for a flexible judicial policy in the application of noise regulations. However, such a policy must be balanced by an understanding of some of the essential functions of noise regulations, and the danger of excessive disregard for these standards. We will now attempt to show some aspects of this problem.

V. *Functions of Noise Regulations and the Dangers of Flexibility*

The increased efficiency in regulating noise enjoyed by Israel since establishing acceptable decibel levels is shared by other countries. Toronto, for example, since passing an anti-noise law with provisions for measurement, has reported a high degree of success in obtaining convictions.⁶⁹ The Israeli experience, however, as we have mentioned, has been primarily enforced by administrative measures based on the measurement of violations and the conveyance of this information. A judicial policy which does not attach enough significance to acceptable decibel levels is likely to jeopardize the administrative methods which thus far appear to be reasonably successful.

Violators perceiving themselves exposed to nuisance actions despite their control and successful compliance with regulations may view their often costly modifications as fruitless or not worth the expense. Conversely, if

inability to sleep, read or carry out any serious business in his apartment due to the noise from the neighbouring hotel's cafe was sufficient to prove the existence of a nuisance according to the Civil Wrongs Ordinance. The appellant's claim that the defendant was overly sensitive was not accepted as a valid defence in light of the objective interference in the defendant's use of his property.

⁶⁷ "Equity" (1982) 15 Creighton L.R. 272 at 274.

⁶⁸ *Farley and Lewers v. Atty. General*, *supra* n. 58 at 1709.

⁶⁹ John Swaygen, "Environmental Law, 1975-1980" (1980) 12 Ottawa L.R. 464 at 469.

violators, on the basis of cases such as *Odem*, believe that they can convince the court that their violations of the standards set by the regulations are not unreasonable, then their motivation to respond to Environmental Protection Service appeals would be diminished.⁷⁰ One of the dangers a too flexible judicial policy might hold is a decreased response to administrative appeals.

Another function of noise regulations potentially endangered by an excessively flexible policy, is the "enhancement of the public's certainty". For example, any incentive that a developer might gain from learning the specific limitations on noise, may be nullified by excessive disregard for these standards.

This consideration is particularly valid when one considers how many such developments are public projects. Donald Black writes:

A frequently expressed argument has been that the courts must help effectuate the public policy promoting the construction of streets and highways by "seeing to it" that the costs of public improvements involving the taking and damaging of public property for public use be not unduly enhanced.⁷¹

Developers might, in fact, reach the conclusion that due to a particularly flexible "anti-noise" policy of the courts, the number of claims might escalate despite all their efforts to comply with the regulations and make new construction prohibitively expensive.

Finally, scientific measurement tends to enhance the court's efficiency. Israel, with severely crowded courts, should find such a consideration important. Black writes: "Theories that place tangible physical factors at the juncture of liability ease the management of justice and this has been traditionally favored by the court".⁷² An Israeli court decision involving noise cannot, it seems, be handed down without commending the potential simplification of measurement.

⁷⁰ The court's position can be criticized on two more levels: 1) Lack of consideration for the tone, frequency or type of noise and 2) Inadequate regard for those residents already suffering from a level of noise beyond that from which the law promises to protect them. The question of why these citizens should have to suffer an additional nuisance in a case where the law can help them, is not addressed. If a "burden of proof" approach had been applied, the petitioner would have at least had to prove that the prevalence of traffic noise made the disturbance from customers' conversations negligible for the area's residents beyond the sole criterion of decibel level. Assuming that the complaints were not completely unfounded this would have been difficult.

⁷¹ Black, *supra* n. 62 at 444.

⁷² *Id.* at 446.

In general as the flexibility of a judicial policy grows, the meaningfulness of noise regulations diminish. Israel, having existed so long without such standards, should not in effect, turn the clock back, and display indifference to the notable advances in acoustic science.

VI. *Towards an Optimal Judicial Policy*

The value of any judicial policy will ultimately be dependent upon the quality of the regulations that are applied. Therefore, our analysis of the desirable legal situation will be divided into two principal spheres: legislative changes and the policy of the courts.

There are numerous elements which should be included, to the extent possible, in regulations in order to take into account the complex nature of noise. Among these are background noise, frequency, duration, source and location. The Environmental Protection Service is currently rewriting the 1977 Regulations to include such elements synthesizing sundry elements of international efforts in the field.⁷³ Regulations are to be based on standards similar to those of the State of Illinois where different permissible decibel levels are allowed for different frequency levels.⁷⁴

Another suggested change would be the insertion of background noise as a factor. Background noise levels, if not measured, might be assumed on a scale which varies from 25 dB. in a primarily industrial area, to -10 dB. in a rural area. Night time standards may be stiffened. The committee intends to submit its suggested regulations shortly. Nevertheless, it too has reached the conclusion that even a more precise and sophisticated set of regulations is not capable of defining every instance of unreasonable noise and that in many cases the final determination should be made by the courts.⁷⁵ It is hoped that this conclusion finds expression in the provisions of the regulations dispelling the last remnants of the restrictive position which still finds support.

Even such improvements, however, will not begin to regulate mobile sources of noise, the major contributor to the problem, properly. Local efforts, like the unsuccessful attempt made in the city of Rehovot to limit

⁷³ Working Draft of Regulations for Unreasonable Noise (suggested amendments) (Environmental Protection Service, May 1984).

⁷⁴ Illinois Control Board Rules and Regulations, Chapter 8, Noise Regulations, (1973) secs. 202-204. The Regulations are an illustration of just how much frequency should effect measurement-decibel levels range from 72 dB. to 32 dB. corresponding to frequency changes of 31.5 to 8000 Hz.

⁷⁵ Interview with Ossnat Arnon, Acoustics Director E.P.S., June 9, 1984.

truck traffic in residential areas at night, are important steps although they cannot replace effective central regulation of vehicles in use.⁷⁶

Problems of vehicle regulation point to the need for an expansion of the "strict liability" approach found in the 1966 Regulations.⁷⁷ Recently strict liability prohibitions, for which the existence of the *actus reus* of the offence is sufficient for conviction, have been widely applied in traffic violations. The prohibiting of certain noisy activities at certain hours and places, offers the advantage of enforcement without resorting to the complexities of measurement. The desire of the legislature to impose on the public consciousness a particularly pressing or new social problem which is the result of technological change, is often given as a justification for the enacting of such offences; Israel's noise problem is certainly one which demands such treatment.

In the United States, for example, the disturbances caused by airports have often been mitigated by the ceasing of all air traffic at a certain hour. An airplane which lands after this hour is in violation of the law regardless of the airline's intent or whether the noise is proven to exceed a given level. There is no reason why Israeli airports such as Sde Dov, located in a crowded Tel-Aviv residential area, could not vastly improve the area's quality of life with a similar approach. Rehovot's attempted prohibition of night time truck traffic in residential neighbourhoods would have been a fine example of such a regulation. This approach was in fact the initial way in which the Kanovitch Law was applied, and with success. More extensive and specific regulations of this nature would certainly remove many obstacles in private litigation and enhance the public's ability to protect a quiet environment.

Beyond technical improvements there is a geographic factor worthy of mention. Because of the limited mobility of sound, control of stationary sources of noise have more potential for effective control than any other form of pollution.⁷⁸ To this end, recent bye-laws passed in some of Israel's major

⁷⁶ Telephone Interview with Nili Baram, legal advisor to the city of Rehovot on June 17, 1984. Lack of overnight parking lot space made the plan unrealistic.

⁷⁷ See *K.T.*, no. 1896, p. 2264. These regulations were not altogether ineffective; a provision as seemingly banal as para. 6, which forbids the moving of trashcans before 6:00 a.m. In changing the trash collection schedule a contribution is made to early morning peace that is not inconsequential.

⁷⁸ For a comprehensive examination of the potential capabilities of local government in noise regulations, see "Local Actions and Pilot 'Quiet Towns'", in *Conference on Noise Abatement Policies, May 7-9, 1980*. (Chateau De La Matte, Paris, 1980). Particularly of interest is the success in regulating moving sources of noise in San Diego, Cal. See *San Diego California, Case History of a Municipal Noise Control Program*, (U.S. EPA-Washington, March 1979). Also see "Six Cities Considering Adopting Noise Control Ordinance", *Noise Regulation Reporter*, Nov. 29 1982 at 179 on local efforts in Colorado.

cities which, being the process of expanding regulations and inclusion of acoustic measures, are a positive step toward effective local treatment of nuisances.⁷⁹ It is hoped that less densely populated areas will also join this process, as urban populations need not be the only ones requiring increased protection. Indeed, recent studies have documented the negative effects of noise even on the size, weight and reproduction of farm animals.⁸⁰ Local governments are naturally better equipped to take into account the "subjective factors" mentioned above. Providing those who wish a relatively noise-free environment in which to live should be a priority to which a municipality should aspire in insuring "quality of life" for its residents. Unfortunately, as Kretzmer writes: "In Israeli society the value of environmental quality and the costs of environmental pollution are grossly underestimated", and he cites the 1973 First E.P.S. Report on Environmental Quality:

The essence of noise in Israel as a social problem has not yet been made known to the public, and quiet has not been acknowledged to be a human and cultural value.⁸¹

Although the situation has seen improvements in the ten years since the report, many municipalities have not yet taken advantage of their administrative and legal potential to minimize disturbances, nor have citizens forced them to do so.

The courts should approach noise regulations with a clear understanding of regulatory inadequacies along with the dangers of excessive flexibility. A few principles already established by Israeli courts should help guide future decisions.

1. The principle laid down in sec. 10 (1) of the Abatement of Nuisances Law should receive more attention and be interpreted so as to expedite an optimal balance. The *Farsht* rule which dictates that violation of the

⁷⁹ Tel-Aviv Bye-Law (Prevention of Noise), 1982 *K.T.*, no. 153, p. 107; Haifa Bye-Law (Prevention of Noise), 1984 *K.T.*, no. 222, p. 453. Ramat Gan and Ashdod have also passed similar bye-laws. These laws are much more extensive than those they replaced, including specific standards for alarm systems according to neighbourhoods, and provisions allowing city inspectors to "enter a place in which he has reasonable suspicion to assume a violation of the law is transpiring". Measurements are to be taken according to the 1977 Regulations.

⁸⁰ Report of Second Federal Interagency Noise Effects Panel, *supra* n. 61 at II-7.

⁸¹ Kretzmer, "Judicial Conservatism v. Economic Liberalism," *supra* n. 9 at 315. In the United States the right to a quiet environment is beginning to receive the same legitimacy as the right to clean air or potable water. For example, demands like those which would require juke boxes to offer periods of silence for the cost of a record, once seemingly absurd, are becoming increasingly credible.

regulations shifts the burden of proof to the defence should be explicitly expanded so as to allow the prosecution the opportunity to prove a noise "unreasonable" on the basis of subjective factors in the event that the defence has shown compliance with the regulations. In other words, compliance or violation of the regulations should shift the burden of proof; compliance should not, as stated by the *Dan* decision, be an absolute defence.

2. If the subjective test for disturbances, in sec. 2 as suggested in *Farsht*, would in fact "live up to its name" and allow sufficient judicial discretion to treat each case according to the specific sensitivities involved, it too might provide the desired flexibility necessary for optimal judicial policy.

3. However, the presumption in sec. 10 (2) "that it shall be a good defence that the accused or defendant has fulfilled every obligation imposed on him by directions issued under sec. 8" should be interpreted as restrictive or granting a defendant immunity from actions. Such directions are by their very nature, specific individual regulations, and will presumably be able to weigh the unique circumstances and subjective factors inherent to such nuisances. The defendant who does all within his power to comply with E.P.S. regulations and directions would not have to suffer additional harassments, and thus large projects which receive the attention of government ministries anyway would be ensured reasonable certainty provided there is compliance.⁸²

4. Even in the absence of directions issued under sec. 8, the courts should continue the policy stated in *Odem* which weighs the efforts of the defendant in complying with the standards as a consideration when determining the "unreasonable" nature of a noise. Ultimately, the goal of the court should be to encourage compliance and this is not only done by the punishing of violators. Kenneth Gifford, in criticizing a Victorian nuisance law writes:

It does nothing to encourage the authorities carrying out those limited instances of public works to limit their noise effects. Indeed the bill is in such a form as to encourage them to design their work to avoid

⁸² It is worthy of note that no orders in accordance with sec. 8 of the Abatement of Nuisances Law have been issued heretofore in the area of noise regulation, although the Ministers have utilized the provisions in the area of air pollution. There is no reason why sec. 8 could not be an effective tool in combating noise pollution particularly with the increased proliferation of Environmental Impact Statements in the planning stages of building in Israel.

compensation rather than to design their works to limit their noise effects.⁸³

The flexibility which the Kanovitch Law can offer through the courts correctly interpreting the role of measurement through sec. 10, can prevent such undesirable results.

5. The problem of accessibility to noise meters is a natural one. Its seriousness is however mitigated by the fact that it generally arises in nuisances of a unique or non-repeating nature. In such cases, where the violation is in fact a gross one, using human hearing and post-nuisance measurement as evidence (as in *Farshit*) is generally an acceptable alternative measurement. It is suggested that isolated cases of minor violations are likely to occur in the most progressive of urban settings. Provided that they do not recur, such violations should not pose a serious hazard to the public. The use of "post violation" memory should be used extremely carefully, as the violation becomes less clear when accuracy is questionable. Excessive resort to these substitutes makes the specifications of regulations superfluous and is likely to lead to inaccuracy and the miscarriage of justice.

VII. *Summary*

A review of the Israeli regulation of noise reveals a maturing process in which the undeniable contributions which acoustic science can offer are being weighed against the growing recognition of noise measurement limitations. We suggest that an optimal policy in the regulation of noise should begin by a reasonable expansion of "absolute offences" whose existence would constitute a nuisance at given hours. Regarding those activities which are not forbidden, the court should use measurements in determining the existence of a nuisance, compensating for their limitations by flexible application, while exhibiting restraint so as to maintain a policy which encourages compliance with scientific standards. Allowing acoustic measurement to determine the burden of proof, while making compliance with specific government directions an absolute defence, is an effective way to reach such a balance. This protection of both objective and subjective factors is essential if the interests of both the public and those responsible for potential sources of noise are to be protected. With increased use of absolute offences, a continued incorporation of technical progress in the regulations involving measurement, increased local involvement, and a balanced policy of judicial flexibility vis-à-vis measurements, the regulation of noise can continue to be an increasingly successful and equitable one.

⁸³ Gifford, *supra* n. 50 at 416.