### "HALAKHAH IN THE AGE OF SCIENCE"

### I. INTRODUCTION.

- 1. The challenge of changing world scene upon traditional Judaism in its philosophical aspects dicussed by previous lecturers. Theadvent of modern science brought with it a new conception of the universe & man's place in it, and Judaism had to react to the new philosophies. This philosophic intercourse is no doubt of great significance.
  - But ultimately, Judaism's survival depends on: HALAKHAH. If no preservation of H., then no matter how successful the phil. adjustment no Judaism. And if succeed in holding to H. in changing world, then philosophers will have to struggle, but they will have something of value to say in end. For just as philosophies nourished by mod. science conflicted with philosophy Judaism, so practical discoveries and inventions of natural science presented great problems Halakhist. And just as in natural science, the science itself is basic and primary, and the philosophy issues from it; so in Judaism, Halakhah is the given, the primary data, the raw material; and from this a philosophy of Judaism must grow; not vice—versa...
- 2. For indeed the modern age of science has presented some mighty challenges to the H.

  Examples: ARTIFICIAL INSEMINATION (late 19th cent reproduction without copulation yet we must answer from a literature first written 1800 yrs. ago, codified 500 yrs ago);

  ELECTRICITY...RADIO & TV (including the Ethics of Communication)...
- 3. HALAKHAH had before it 3 CHOICES ON HOW TO REACT to mod. science & technology:
  - A) SUCCUMB. since 2 dufferent worlds, hence H. outmoded. At very least all new is permissil
  - B) IGNORE. restrict H. & communicants to ghetto. Declare all new forbidden
  - C) CREATIVE R ESPONSE: use the challenge of mod. world as incentive to inner advantage.
  - Is testimonial to the inner vitality of H. that it naturally chose third alternative.

    \*\*\*\*"DITHER" - Warren Weaver editorial "Science" kinetic fristion less than static....

So did H. regarded the challenge of Mod. Sci. - irritating but refreshing; provoking but never threatening. The challenge kept moving students H. off dead center of pilpulistic inversion, intellectual inbreeding. Rather - - new creative exploits, new horizons.

H. has been kept "IN A DITHER" since days Moses, but most especially in mod, age,

& thus can feel prepared to cope any new situation.

- 4. To appreciate NATURE of the CHALLENGE to H., and the SCOPE of the PROBLEM, need background:
  - A) SOURCE: "TORAH MIN HA-SHAMATIM"..not man-made
  - B) WRITTEN AND ORAL LAW TALMUD
  - C) HALAKHAH "WAY" OF LIFE UNIQUE FOR JEW (S.R.HIRSH: "LE-MINO")...ETHICAL GOAL:
  - D) since H. MIN HA-SHAMAY IM, 2 consequences:

    1. IMMUTABLE Maimonides' 9th IKKAR: A TIN HALLY RELEVANT

    THUS: source TENSION if immutable & eternally relevant how apply changing world?
- II. THE JUDGMENT OF HALAKHAH ON MOD, WORLD.
  - 1. Is contentionthose who hold H. valid that not only can H. find answers to these practical problems, but: That halakha has a judgment to make on Man Himself in Mod. World; That the more science and technology advance, the more necessary is it for moral, spiritual welfare of Man that the opinion of the jewish tradition, thru halakha, be articulated clearly and unequivocally.
  - 2. \*\*\*STORY OF 01/2 18/11/21/8/11.
  - 3. (ELDAD: CAIN REPRESENTS CREATIVE, PROGRESS. ABEL IS "SHOMER"...CANNOT AFFORD TO KEEP ABEL DEAD.
  - 4. Therefore: "H. & MOD. SCIENCE" ought be discussed on 2 levels: legal & philosophic: how

    J.IAW reacts...& PHILOS: NOT what previous lecturers in the classic philoproblems as

    causality & freedom, creation vs. evolution rather: moral, spiritual judgment on

    mod. life derived from the primary constructs of Halakhot, extrapolate to inclusive principles

    try to find basic fundamentals which can then be made to apply larger, universal situations.

    EXAMPLES: Continued NUCLEAR BOMB testing (indiv. vs. society); FIFTH AMENDMENT;

    CAPITAL PUNISHMENT; POPULATION CONTROL; BUSINESS ETHICS; PUBLIC MORALS....

\*\*\*TONIGHT I concentrate on LEGAL, for if H. fails here, its voice on the larger problems of the day must be muted. The straight Halakhic question is more fundamental.

#### III. METHOD.

- 1. Branch RABBINIC LITERATURE most relevant: RESPONSA LIT. ("case history law")... Rabbi Maimon: in addition to Shulkhan Arukh &nits extensive lit., exist over 2000 120 63101.2 alone! BBOKS ...containing OVER 100,000 responsa on. Englishereaders \*\*refer them to TUCHMAN column in TRADITION...Also Schechter article...NOAM...Freehoff...
- 2. Great HALKHISTS attitude towards NAT. SCIENCE was commonsensical. NOT RECOIL IN FEAR & REVULSION ... ACCEPTED AS NATURAL UNFOLDING HUMAN INGENUITY ... ALSO NOT OVERWHELMED, WONDER-STRUCK, OVER-IMPRESSED. \*\*\*R. JACOB ETLINGER ( 50-113 1/1 wil) Geramn - mid-18th cent - asked if permitted to attempts ubmit to therapy of HYPNOSIS - questioned it as: 9182 3140162 21/7- 72 (7) 7133 108 Answered: full permission. Is a natural phenomenon, tho reason, mechanism unknown. And appends this remark: 17 PU 36k 112/11/10 PIN 12 CO NO ST CO NO ...thus revealed MATURE UNDERSTANDING COMPLEXITY NATURE; IMMENSITY TASK FACING INVESTEGATOR
  - OF NATURAL PHENOMENA; ALSO EMPRIRCAL NATURE OF PSYCHOLOGICAL THERAPY.
- 3. This attitude of RESPECT BUT NO FEAR for nat. science by Halakhists also reveraled by LATE CHIEF RABBI HERZOG: TECHNOLOGY OFTEN OFFERS OWN SOLUTIONS TO PROBLEMS IT CREATED. THUS: AUTOMATIC MILKING MACHINES FOR USE ON SHABBAT (already in use); HYDROPONICS... \*\*\*Story: wait long enough, science will change a bit...DOCTOR TO G.I. CAN'T SLEEP.....
- 4. HOW DO IT? SECULAR LAW easier - tho it too works on basis of respect of a constitution which inviolate. But they can: \*\* LEGISLATION (us:no Sanhedrin, rare Tekanah); 12257 111 191012 11 \*\*CONSTITUTIONAL AMENDMENT OR CHANGE (we can't - TORAH MIN HA-SHSMAYIM); \*\*\*INTERPRETATION . Open to us too. Our method. Taxes creative ingenuity of Halakhist.
- 5. INTERP. IN HAL. LIT. FOR MEETING NEW SITUATIONS involves generally a logical analysis of a known Halakhic problem with roots in precedent; then extending the principles to cover the problems under consdicration. IN THIS THE HALAKHAH HAS BEEN EMINENTLY SUCCESSFUL. A GREAT DEAL OF PRECEDENT # "YAM HA-TALMUD" ... for even more

- 6. and even more: HALAKHAH MUST BE CONSIDERED FUNDAMENTALLY AS A METHODOLOGY. H. is
  first & foremost a METHOD, & that's why new problems don't frighten it...
  Main part this lecture will be to show how Halakha as a method is employed to these ends.
- 7. FASCINATING: in seeking precedent in literature to apply to it the Halakhic Method in meeting new problems, modern halakhists often chose as starting points UNUSUAL TEXTS CURIOSITIES, passages and cases no over ever thought could be applied. CHOSE AGGADOT ...MIDRASHIM...LEGENDS..."HILEHETA LI-MESHICHA" - for these BIZARRE incidents were treated in a manner that did not conflict with the Halakha that applies to normal life. THUS, for example, IF & WHEN A ROBOT IS EVER CREATED IN HUMAN FORM, CAN THINK FOR HIMSELF, & INVENTED BY A JEW...WILL HAVE PRECEDENT FOR DECIDING HIS RELIGIOUS STATUS, MINYAN, SHABBAT, MURDER, ETC. (Chakham Tzevi and R. Jacob Emden). THUS TOO (see later) the questions of ARTIFICIAL INSEMINATION AND LIE DETECTOR. \*\*\*OUR ability to use those texts today is TRIBUTE TO COMPREHENSIVE SCOPE, EXHAUSTIVE SWEEP OF ENCYCLOPEDIC TALM. LIT. Hence even today should not castigate those who study seemingly irrelevant tractates(KODOSHIM ...as in natural science: basic reasearch...

IV. EXAMPLES FROM THE RESPONSA LITERATURE.

- 1. SIMPLE LOGICAL ANALYSIS APPLIED TO NEW SITUATION: INTRAVENOUS OR ENEMA FEEDING ON YOM KIPPUR.

  Talmud: no mention this form getting nutration. If' (a) DIP a no problem. No DIP a

  R. ABRAHAM SAMEEL SOFER ( 2010 200, Pressburg, 1870's): analyzed eating: DIP a AND pleasure of act of eating; (INN AND nutritional benefit of having eaten. In intravenous or enema no' () 12 AND Hence, is not a final final form.

3. ANOTHER EXAMPLE DIRECT EXTENSION OF KNOWN PRINCIPLES: FINGERPRINTING ON SHABBAT.

R. Aaron Walkin ("Zekan Aharon", 1938) - -who incidentally declares it obligatory for proselyte recite KADDISH upon death non-Jewish parent - - questioned by army recruit: is it part of "writing" on Sabbath? Walkin: R. YOSE and RABBIS (Sab.103) if major category is WRIBING (2A13) or MARKING (212) - - depending on whither boards of Tabernacle were matched by alphabetical letters or other symbols. But since both ultimately forbidden, sotoofingerprinting out.

4.ELECTRICITY presents one of major problems:

(originally; later: paid)

- A) Sabbath Candles: R. YITZCHAK SHMELKES (Lemberg, Bet Yitzchak, 1875) permissible. Most: NO
- B) CHANUKAH candles: " No. [yahvle,t- No. Zena: symbols [Ne-2], soul-body]
- C) example of a "KULA" : No so (c) C.
- D) Most important: is it considered a form of work forbidden on Shabbat? And if so: what?

  1.Discussed by at turn of century R.YITZCHAK SHMELKES, R.SHALOM MORDECAI SCHWADRON,....
  - 2. First thought: , TYZ?, BURNING, FIRE. BUT no flame! Esp.incandescent bulb.
  - and how Rishonim classify that act of "tempering". ( your hand in: 1/2011)

4. Chief Of Chaplains GOREN: assigns to RIN - COOKING! (Talmud:sixftening tar is lee)

Mentur AOJC - wy article there

5. USE OF MACHINES FOR PRODUCING RELIGIOUS ARTICLES.

- A) MATZOS once an occasion of great controversy. Similarly:
- B) TZITZIT here are two questions: requirement of ) N(), intending work for religious purpose; and (122 h), that it be prepared by human effort. First can be acheived by simple mental effort. Second: those who are permissive maintain that pushing the button which activates the machine is reckoned as responsible for the whole process.

# 6. PRAYERS AND BLESSINGS BY RAIL O, PHONOGRAPH, ETC. (www.

- A) Must we answer AMEN to blessing on radio, tape?
- B) Rabbi Toledano: Radio OK speakers KAVANAH applies to the voice. Not so with tape no immediacy you can tape voice, can't record a KAVANAH.

7. EXAMPLE OF A NEW HALAKHIC PROBLEM INVOLVING PHILOSPPHIC PROBLEMS : SMOKING ON TISHA B'AV

A) Debated at trun of century by R. SHALOM MORDECAI SCHWADRON and "DARKEI NOAM".

1. Forbidden because of Pen lin- since gentiles don't smoke on their fast days.

2. Permitted - for this very reason: no mimicry 1000 MPD'AIPINZ.

(of life - pripo 10 He lek . PAULDING SION - Alsh DENA III 102: NEODIO 333)

8. EXAMPLE WHERE SOLUTION OF ONE PROBLEM OF AN INVENTION SETS PRECEDENT FOR ANOTHER: FINGERPRINTS

A) Question of criminal identification, release of husband or wife by identifying dead spouse, as signature on legal documents.

B) Basically, is a problem in definition of IT \_NYNV - what constitutes RECOGNITION or IDENTIFICATION. But problem not treated de novo.

C) Is compared (in NOAM II) to problem of IDENTIFICATION BY PHOTOGRAPH! Thoroughly discussed by Lemberg Rabbi Zvi Hirsh Orenstien ( 33)

## 9. EXAMPLES OF SOLUTIONS BY USING PRINCIPLES FOUND IN UNUSUAL TEXTS: ARTIFICIAL INSEMINATION.

A) Some of the problems: fulfilled mitzvah of PERU UREVU? - honor, inherit, strike father? -: Palabout lay as stole lala ! adultery and illegitimacy? - forbidden emission of sperm? - insemination during NIDDAH?

B) Research on domestic animals during late 18th century. First test-tube baby:1866 Estimate today in USA - tens of thousands. How solve from old Halakha?

c)Bizarre text 1800 years ago, long considered peice of impractical casuistry:

DUCK IN HES KNE PIGEN ... - GUD LIDNU DICKE DEUS LE VIEINE : 3, DEIGH

\*\*don't know what led to this question. Perhaps just exhaustive consideration of

all possibilities in a law. PERHAPS (Zeide's suggestion) an anti-Christian statement.

EVEN eminent 18th century Talmudist, Constantiniple, MISHNEH LEMELEKH denied possibility

\*\*ANYWAY - Talmud considers her a VIRGIN. If AMVATI considered COPULATION, then greater

# 10. ANOTHER EXAMPLE OF AN UNUSUAL TEXT PLUS KNOWN PRINCIPLES: LIE DETECTOR & TRUTH SERUM.

- A) Saved for last because personal element my She'elah to Grandfather, his response
- B) FOR EXAMINING WITNESSES IN CAPTTAL CASES: Not Good. Talmudic (Sanh 32) principle of (NOID i.e. while every effort for dependant, still justice (required by Capta 1700 A771) demands that witnesses not be intimidated by judges who show open suspicion. WITNESSES TO BE EXAMINED TO ESTABLISH FACTS, NOT TEST CREDIBILITY.
- C) Yet INTERESTING MIDRASH (Yalkut Esther; Targum Sheni) splendors of Throne of Solomon - surrounded lions, bears, eagles, etc. Also: MENAGNIN PAK'B'IN (ingenious apparatus of wheels) if witness came to Solomon intending to give false testimony whells truned, lions roared etc., came clean.
- D) Zeide: Isn't this a violation of principle of | NOIP ?

### V. CONCLUSION.

- A) What I tried to show by both exposition & illustration is that the Halakhah, kept
  "in a dither" by modern science, certainly has the capacity to respond, to formulate
  an approach that is both liveable and does no violence to the letter & spirit of our
  Eternal Law.
- B) Solutions do exist -for past, present & future problems. Perhps to some we have not yet developed a definitive approach but remeber that a PESAK DIN is not like pushing a button on IBM electric brain: Halakhah is a specific methodology applied to very large number texts, requiring <a href="https://example.com/human">human</a> ingenuity, and such un-technological considerations as psychological motives, sociological effects, etc.

- C) Add a final word of caution: there are those to whom a "solution" is not a "solution" unless it satisfies their quest for convenience or comfort. Such thoughts do not generally enter into consideration. Like the Rabbi who was challenged by a skeptic who asked whether it was really true that G-d answered all prayers and Rabbi answered, "Y ES, BUT SOMETIMES THE ANSWER IS 'NO'", so sometimes a solution must be NO.
- and yet can prove relevant to all generations. It has the capacity to survive and even be strengthened in the Age of Science. But from us it requires courage, the strength of our convictions. It requires great, concentrated intellectual effort.

  AND ABOVE ALL \* it requires a reverent approach. When Moses entered upon Holy Ground, approaching the Burning Bush, the voice of G-d commanded him, \( \)

If we will remove our shoes out of reverence for the Torah, we will discover that the Heavens above our heads will be opened, receptive to the genuineness of our intentions and respons we to the historic effort hat our generation must make to preserve our heritage and hand it on elements of the p

