

Urgent Briefing Paper

Tel Aviv University – A Leading Israeli Military Research Centre

Prepared By SOAS Palestine Society, February 2009

In the rough and tumble reality of the Middle East, Tel Aviv University is at the front line of the critical work to maintain Israel's military and technological edge.

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Introduction

Tel Aviv University (TAU) is Israel's largest university. Like any large university, TAU hosts an extensive range of well-regarded research and teaching programmes in almost every discipline. Unlike most large universities, TAU is also heavily and openly involved in military research and development (R&D), deeming the pursuit of state security prerogatives and academic research to be harmonious enterprises at the centre of its institutional mission. The following pages offer a brief and necessarily incomplete description of just some of the current work being conducted in the dozens of TAU departments presently collaborating with the military. Nothing is said here of the many professional links between TAU's senior management and the army; nothing is said of the university's discriminatory housing, scholarship, and access practices privileging demobilized Jewish soldiers over Palestinian citizens; nothing is said of TAU's discriminatory mission of serving first not the citizens of the state but of being rather a definitionally 'Jewish university'¹; and nothing is said of the university's historic role in illegally transforming depopulated post-1948 Palestinian land into a state resource.² While these are all necessary components in arriving at an understanding of the full extent of TAU's deep involvement in the pursuit of exclusivist and violent nationalist goals, space prevents their being treated fully here. Instead, this document examines only the most direct and immediate aspects of TAU's instrumental contributions to the state's ongoing military projects; it highlights the explicit institutional culpability of TAU in the design and execution of war crimes and in the subjugation of a people. This is, remarkably, an aspect of TAU's investment in nationalist projects which has received too little attention and yet which most vividly reveals the human consequences of international acquiescence in the militarization of academic institutions in Israel. What follows then is a brief survey of the types of institution and programme which are currently bringing together scholars and soldiers in the laboratories, clean rooms, and classrooms of one of Israel's premier security research establishments – Tel Aviv University.

The briefing paper comprises five sections. In the first, the scene is set with an account of a major weapons technology and strategy workshop held at TAU between the Lebanon 2006 and Gaza 2008-9 campaigns. Following this, examples of three TAU institutes heavily involved in shaping security doctrine are given; these are followed by two examples of senior TAU scholars whose involvement in military affairs is intense and emblematic of the types of dual competence which unite the university with the army. After this, a survey of a recent TAU bulletin is given to illustrate both the striking extent of inter-departmental involvement in military R&D and the public celebration of this work on the part of TAU's senior management. The paper then concludes with an account of the overt role played by TAU security experts, military strategists, and legal consultants in the commissioning and legitimizing of war crimes of the most extreme variety, such as those recently seen during the Gaza offensive.

Setting the Scene: 2006-2008 - From Lebanon to Gaza via Tel Aviv University

In December 2007, seventeen months after the Lebanon War, high-ranking officers from the Israeli armed forces convened with chief scientists from the arms industry to evaluate the roles played by new technologies in a military strategy designed, in the words of its architects, to take 'Lebanon back 20 years by striking its vital infrastructure.'³ The event, "Electro-Optics in the Battlefield of the Future", was organised and hosted by TAU's Science, Technology, and Security Workshop under the chairmanship of Yitzhak Ben-Israel.⁴

Emblematic of the overlapping competences and closely integrated knowledge circles which characterize what is currently the fastest growing high-tech arms industry in the world, Ben-Israel holds the rank of an air force General, is head of Israel's Space Agency, a Member of Knesset for the ruling Kadima party, and Chair of the Knesset's Lobby for the Defense Industries. Meanwhile, a TAU professor, Ben-Israel heads Israel's largest Security Studies Programme, an integral component of its officer-training apparatus and a principal venue in the development of military doctrine. The TAU Programme takes pride in its contribution:

In view of the fact that at least 50 percent of the Program's students currently belong to the middle and upper echelon of Israel's defense establishment, it is expected that by equipping them with new conceptual tools and concepts, their actual contribution in such areas as defense planning, research and intelligence assessment, can be greatly enhanced.⁵

At the conference, TAU physicists, air force intelligence officers, and electro-optics engineers presented field data gathered during the 34-day war in which 1,191 Lebanese and 43 Israeli civilians were killed. Strong ties between army and academia were emphatically linked to the "successes" of Israel's weapons ventures. TAU Professor Avraham Katzir observed:

One of the things which helps the State of Israel [...] is the fact that each one of us is both an Israeli citizen and working in these fields [...] I'm an academic at university and I've also done my [military service], and I was also at [state arms manufacturer] RAFAEL for some years. All of those things come together; we're helping one another – something which doesn't happen [elsewhere]; I've been in the US and Europe, and there there is a disconnect between the workshops and the army; they hate the army! [With us], I think that we succeed by virtue of the fact that we help one another so much.⁶

Haim Russo, a CEO of Israel's largest private arms concern, and 8th largest industrial company, ELBIT, went further, crediting academia with 'standing behind this whole vast industry.'⁷

The conference saw imagery mined from cyber-war fantasias like *The Matrix* interspliced with often gruesome optical acquisitions from the newest warheads and unmanned aerial vehicles deployed during the Lebanon war. Its keynote speakers from industry and academia detailed learning outcomes from new weapons trialled during the last war and offered projections on the shape of the next one. That "future battlefield" recently became the reality in and above the Gaza Strip; its technical and conceptual form-taking is the direct outcome of the types of intense collaboration between scholars and generals, scientists and soldiers, celebrated and epitomised at TAU in December 2007.

Tel Aviv University: A State Institution Serving State Interests?

I myself am awed by the magnitude and scientific creativity of the work being done behind the scenes at TAU that enhances the country's civilian defense capabilities and military edge'

TAU President, Professor Zvi Galil (2008)⁸

There is nothing outwardly remarkable about a state institution serving state interests. However, when that state has been in an official state of emergency since its inception, enlists close to 80% of all Jewish adult males in military service, has invaded and occupied territories of all its neighbouring states, maintains the longest enduring illegal military occupation in the world, and relies on arms for 25% of all annual exports, the forms such interests take are often themselves remarkable.⁹ TAU, as the largest university in the country, contributing both directly and indirectly to state goals, exemplifies the militarisation of state institutions in this context of permanent mobilisation. From ethicists to data-miners, TAU faculty have been and continue to be central in moulding the operational and conceptual shape of the state's military, intelligence, and policing arms. The following are a very few examples of current or recent work conducted at TAU.

Military-Academy Links: Institutional Support – Three Examples

People are just not aware of how important university research is in general, and how much TAU contributes to Israel's security in particular

TAU President, Professor Zvi Galil (2008)¹⁰

TAU is comprised of multiple faculties, institutions, laboratories, and collaborative centres. The following examples represent three very different types of TAU institutional form. It is not our claim that either of these can or should be considered the only or even the normal type of institution operating at TAU, and nor is it our intention to focus specific opprobrium upon these centres and their roles. The examples given are of highly prestigious, well funded, and firmly established research centres. They exist alongside and in organisational concert with every other centre and department composing the larger TAU complex, and while their remit and output is specific, it is central to our argument here that these bodies are understood as integral parts of the institutional whole: They are as much a part of TAU as the Literature Department or Molecular Chemistry Department and apprehending the institutional sum of these parts means attending closely to their roles and remit.

OTRI – In the early 1990s, TAU advised the army that elements of its National Security College, awarding TAU degrees, required improvements in the areas of strategic and operational theory. In response, the army suggested Brigadier General Shimon Naveh be groomed to head a new institute for this purpose. TAU funded Naveh's doctoral studies (in London) and he returned to teach officers at the university in 1995, before establishing the Operational Theory Research Institute (OTRI) to function in concert with the university and with the involvement of its researchers and doctoral students.¹¹ OTRI "pioneered" the urban warfare doctrines which the army trialled in the 2002 offensives launched across the West Bank, and which culminated in the devastating Nablus and Jenin assaults. Eyal Weizman describes these offensives as turning the West Bank into 'a giant laboratory of urban warfare at the expense of hundreds of civilian lives, property, and infrastructure' (2007: 188). OTRI's conceptual work underwrote this project.

INSS – The Institute for National Security Studies is a TAU research centre and Israel's premier strategic think tank. Ostensibly a civilian institution, the INSS is heavily involved in military planning. Military-oriented programs include its "IDF Force Structure" unit, "Terrorism and Low Intensity Conflict" unit, and the "Roizman Program in Intelligence Studies". The INSS operates seminar, workshop, and lecture programs jointly with the National Security College, IDF Command, and National Security Council.¹² It is a key venue in advancing what it terms the 'redesign of the IDF' into a force capable of achieving 'the proper balance between the three threat arenas: classic, non-conventional, and low-intensity.'¹³ In December 2008, the INSS held a conference on "Security Challenges of the 21st Century" at which PM Olmert, FM Livni, DM Barak, TAU President Zvi Galil, and INSS head Oded Eran gave keynote addresses. Eran emphasised the academy-security nexus, noting 'we are now on the threshold of Tel Aviv University campus and this proximity is more than geographical proximity of buildings - it is a fertile and mutually

stimulating proximity'; Barak used the platform to hint at the forthcoming assault on Gaza: 'Obviously I cannot elaborate here; however I will say that we are not deterred from launching a large-scale operation in Gaza [...]'; at the end of his presentation Eran quipped 'we could accept him as a senior researcher at our Institute. Trust me it is not that easy to have get [sic] such highly-coveted researchers.'¹⁴

The Tel Aviv Workshop for Science, Technology and Security – Ben-Israel's Security Studies Program, a unit of the Harold Hartog School of Government and Policy in TAU's Faculty of Social Sciences, has organised this Workshop series since 2002. According to TAU, the workshop 'is co-sponsored by leading Israeli agencies, including the Ministry of Defense, Israel Aircraft Industries, Rafael and Galei Zahal (Israel Army Radio)¹⁵ The Workshops, again according to TAU publicity, bring together 'military officials, current and former military industry representatives, private sector technology company representatives, academics, analysts and students.'¹⁶ Over the past 3 years, Workshop themes have included: *The Future of Ground Warfare* (Jan. 2007), *Aerospace Power* (March 2006), and *Military Intelligence* (Jan. 2005). Regular participants include the head of Israel's National Security Council, the chief of the army's R&D directorate (*MAFAT*), and the head of military intelligence.¹⁷

Military-Academy Links: Personnel – Two Examples: Ethical Killing and Militarised Sciences

There are people in this university dealing with very secret projects, and they won't talk about it.

Dr. Michael Gozin, TAU¹⁸

This document is not about individuals. It is about an institution – TAU – and its direct links to war crimes, oppression, and violence. The following two examples of key personnel involved in the form-taking and management of this institution at its highest level is intended not to shift focus to the individual but, on the contrary, to expose through an account of their multiple competences and concerns how these institutions are invested with ideological and military content. It is paradigmatic that any analysis of human organisation and institutionalisation attends to the effects and character of that institution's various attributes by inquiring into the types of powers and values which it allows, nurtures, or reifies on the one hand, or stifles, and rejects on the other. The following examples of key personnel and their professional output are therefore given not as instances of individual nefariousness – on the contrary, they are intended to expose precisely the kinds of scholarly and military work which the institution itself encourages and grants effective power. Without the institutional support and respect they enjoy, these individuals and their work would likely be peripheral and wholly irrelevant to this account of institutional culpability.

Asa Kasher: Academic Ethics, Censorship, and Assassination – Philosopher of pragmatics and ethics, Kasher is an Israel Prize winner (2000) and the Laura Schwarz-Kipp Chair In Professional Ethics and Philosophy of Practice at TAU. He combines his work at TAU with instruction at the National Security College and has written the ethical codes for scores of state sectors, including the Police, the National Bank, and for Knesset Members. Notably, he is the author of the military's ethical code: *The Spirit of the IDF: Values and Basic Norms* (1994). Kasher has developed the rationale and justification for military doctrines including the use of anti-personnel munitions, assassinations, and torture. From TAU he co-headed the army team which composed Israel's revisionist "Doctrine of Just War" defining "terrorism" as all armed activity 'not on behalf of any state', something 'always morally unjustified'. Kasher thereby produced Israel's "Doctrine of the Just War of Fighting Terror" where 'from the point of view of Military Ethics, a terrorist is a terrorist is a terrorist', and must be met with overwhelming force.¹⁹ This includes torture, assassination ("preventive killing"), and pre-emptive violence.²⁰ Kasher is a member of the Military Censorship Committee, has served on the National Security Council, and is Head of the Inter-University Committee on Academic Ethics.

Yitzhak Ben-Israel: Weapons Design & Deployment: – As noted above, Prof./Gen. Ben-Israel combines a number of high-ranking political, military, and academic competences. He is ex-head of the air force's R&D programme and the military's overall R&D Directorate (*MAFAT*), and is a double Israel Prize winner for security contributions.²¹ As Chair of the Defense Industry Lobby Ben-Israel is one of the most powerful figures in Israel's arms industry – a status reflected in his additional post as Chair of the Israel-India Parliamentary Friendship League (India is Israel's largest weapons client). A TAU professor since 2002, Ben-Israel is the key figure responsible for bringing together each of the academic, industrial, political, and military components of Israel's arms industry, with TAU providing both venue and resources. Since mid-2006, Ben-Israel has been linked with the live "testing" of so-called "DIME" (Dense Inert Metal Explosive) munitions (delivered by unmanned aerial vehicles) in Gaza²²; and since early 2007, Ben-Israel has been advocating a major ground and air assault on the Gaza Strip, claiming that what happened in Lebanon in 2006 'can happen again in Gaza' and Israel must embark on 'the big ground operation in Gaza'.²³ In late 2008, Ben-Israel declared he would not stand for re-election to the Knesset in forthcoming elections, citing 'the dilution of the intellect and the spirit in government'²⁴; he singled out DM Barak, as the 'worst minister Israel has known', arguing he had 'lost courage and adopted "sit and don't do" diplomacy, while Hezbollah and Hamas are only rearming.'²⁵ With the commencement of the Gaza campaign, Ben-Israel threw his weight behind Barak, praising his leadership in the offensive and encouraging greater force: 'If we hit them hard enough, they might come to the conclusion that they shouldn't fire any more rockets'.²⁶ Following the ceasefire, Ben-Israel heralded the advent of a 'a milestone that would be etched in the historic memory of the Middle East for many years' – foremost amongst the gains of the conflict he perceived was the shift in the army's approach to targeting civilians and civilian infrastructure: 'the recent operation showed that even mosques [...] are no longer an obstacle in the face of Israel using its military power' he wrote, arguing that the civilian losses meant that for Palestinians 'the path of resistance has failed, big time.'²⁷

Military-Academy Links: TAU's Recent Publicity Against the Backdrop of 1,300 Dead

In early January 2009, TAU's quarterly *Review* was published. Against the backdrop of the Gaza offensive, the edition offered a special cover-story focus on TAU's 'major role in enhancing Israel's security capabilities and military edge.'²⁸ Replete with borrowed graphics from "*Spy vs Spy*", references to "Q" or James Bond, and playful descriptions of a 'smoke-and-mirrors world', the *Review* lionises TAU's pivotal role in the ongoing development and testing of a vast array of surveillance, combat, and simulator technologies. While the authors concede their account 'only hints at the breadth of security-related research at TAU',²⁹ they describe ongoing high-level military and surveillance research being 'conducted in rooms and laboratories protected by barred windows, multiple locks and office safes.'³⁰

Amongst other programs, the *Review* celebrates:

- New explosives research being conducted in the Organic Chemistry Department (headed by Dr. Michael Gozin);
- Electro-optical missile defence research in the Faculty of Engineering (funded by ELBIT and headed by Prof. Ady Arie);
- Laser and radar air defence systems being developed in the Faculty of Exact Sciences (under Prof. Avraham Katzir);
- Experimental techniques in bird and dog handling being advanced in the Center for Applied Animal Behavior for Security Purposes (headed by Prof. Joseph Terkel);
- Nanotech perimeter security innovations in the Microelectronics Department (headed by Prof. Yoram Shapira);

- Electronic eavesdropping and transmission tracking developments in the School of Electronic Engineering (under Prof. Anthony Weiss);
- New algorithmic email surveillance and data-mining techniques being pioneered in the Fleischman Faculty of Engineering (headed by Prof. Oded Maimon);
- Advances in video-surveillance image-stabilisation in the same faculty (initiated by the army's Intelligence Corps and headed by Prof. Leonid Yaroslavsky);
- Biometric and genomic sorting and surveillance techniques developed in the Chemistry Department (again by Dr. Gozin);
- Aerodynamic and flight control mechanisms for unmanned aerial vehicles being advanced at the School of Mechanical Engineering (under Prof. Avi Seifert);
- And quantum computing and encryption techniques being furthered in the School of Computer Science (under Prof. Oded Regev, Prof. Amnon Ta-Shma, and Dr. Julia Kempe).

These are not “blue sky” generic research programs such as those found in any research university. They are military-funded projects tailored to meet specific Israeli procurement needs defined by the army's R&D Directorate (*MAFAT*). According to the *Review*, TAU currently boasts 55 *MAFAT*-funded R&D programmes, along with 9 DARPA-funded (the US military's equivalent body) programmes.³¹ To date, no other university in Israel has received as many Israel National Security Prizes – 7 have been awarded to the School of Computer Sciences alone, making it the premier security research institute in Israel.³²

Commissioning War Crimes: TAU and the Doctrine of Disproportionality

War Crimes at TAU's INSS - In the wake of the Lebanon 2006 War, in which Israel trialled various new weapons technologies as well as doctrinal innovations, high-ranking officers and senior planners set about developing a strategy to remedy the perceived damage done to Israel's 'balance of deterrence'.³³ The “Dahiya Doctrine”, named for the Shi'ite residential quarter of Beirut reduced to rubble in the war, was first articulated regarding Lebanese civilian populations.³⁴ In late 2008, Giora Eiland, ex-chair of the National Security Council and now INSS senior research fellow, produced a strategic document at TAU's INSS in which he argued the ‘impossibility of defeating Hizbullah’ meant Israeli forces were henceforth to plan for a war ‘between Israel and Lebanon and not between Israel and Hizbollah’.³⁵ This, Eiland argued, would ‘lead to the elimination of the Lebanese military, the destruction of the national infrastructure, and intense suffering among the population’, ends he justified by arguing ‘the suffering of hundreds of thousands of people are consequences that can influence Hizbollah's behavior more than anything else.’³⁶ Acknowledging that such a doctrine ‘may damage Israel's legitimacy, incur international pressure, and even prompt a clear directive from the United States to stop the destruction’, Eiland concluded by advocating ‘high level professional military dialogue between Israel and [...] military leaders in these countries’ in order to foster ‘the requisite support’.³⁷ Eiland's TAU colleague and head of the INSS's “IDF Force Structure” unit, Gabriel Siboni, expanded on the new doctrine in an October 2008 *INSS Insight* bulletin entitled “Disproportionate Force: Israel's Concept of Response in Light of the Second Lebanon War”. In it, he made explicit the need for the military to privilege civilian over and above military targets: The army, he wrote, must ‘refrain from the cat and mouse games of searching for Qassam rocket launchers [...] and] not be expected to stop the rocket and missile fire against the Israeli home front through attacks on the launchers themselves’.³⁸ Instead, Israel was to:

‘[...] act immediately, decisively, and with **force that is disproportionate** to the enemy's actions and the threat it poses. Such a response **aims at inflicting damage and meting out punishment to an extent that will demand long and expensive reconstruction processes**. The strike must be carried out as quickly as possible, and **must prioritize damaging assets over seeking out each and every launcher**.’³⁹ (emphasis added)

Siboni's paper identified Syria and Lebanon, while noting that the 'approach is applicable to the Gaza Strip as well'; he concluded by positing the army's 'primary goal' as now being to 'leave the enemy floundering in expensive, long term processes of reconstruction.'⁴⁰

This doctrine of disproportionality and civilian infrastructure targeting developed at TAU by its preeminent strategic planners and military officers is clearly in extreme violation of international law, not least Articles 52 and 54 of Protocol 1 of the Geneva Conventions which govern the protection of civilian infrastructure in war. The principle of distinction between civilian and military objects and populations in war is a foundational precept of International Humanitarian Law and failure to abide by this principle constitutes one of the most serious war crimes.⁴¹ To do so as part of an explicitly premeditated strategy is rare in its wilful contempt for international law.

Less than two months after the TAU scholars' documents were made public Israel's assault on the Gaza Strip began. At its end, three weeks later, preliminary assessments confirmed an overwhelming civilian death toll, with 895 of 1,285 dead classified as civilian and an estimated 43% of all fatalities made up of women and children (10 Israeli soldiers and 3 civilians were killed in the same period – more than a third by "friendly fire").⁴² Following their preliminary investigations, Amnesty International wrote to outgoing Secretary of State Condoleezza Rice on January 16th 2009, asking her to impress upon her Israeli counterpart the need for Israel to allow investigations of war crimes. The letter, apparently written without knowledge of the doctrinal debates covered above, observed 'there is growing evidence that Israel has failed to adhere to the principles of distinction and proportionality in its military action'; Amnesty noted that '[e]vidence of war crimes and crimes against humanity is mounting daily'.⁴³ The UN's Special Rapporteur on Human Rights in Palestine stressed the apparent premeditative character of these crimes when he described the carnage in Gaza as raising 'the spectre of systematic war crimes'.⁴⁴ As this paper has already shown, the civilian focus of Israel's offensive was indeed neither accidental nor mysterious; it was – in good part – designed and enabled by generals, scholars, scientists working out of TAU.

The same week, Tel Aviv University announced the appointment of the army's Col. Pnina Sharvit-Baruch to its Law Faculty. Sharvit-Baruch is the army's principal international law counsel and was responsible for green-lighting the decision to target civilian infrastructure and for a 'relaxing of the rules of engagement' regarding civilians on the part of the army's International Law Division.⁴⁵ When several members of faculty registered their disquiet at the appointment, the institution's response was painfully familiar; according to *Ha'Aretz*, Law Faculty dean Hanoch Dagan insisted:

'[...] the Faculty of Law makes every effort to expose its students to a variety of opinions and encourages discussion, even about questions that provoke disagreement.'⁴⁶

Concluding Remarks

There is no sense that TAU's senior management are troubled by the militarization of the academy; in fact, academic and military goals are deemed harmonious pursuits at the centre of TAU's mission: Vice President of R&D at TAU, Ehud Gazit argues 'investing in our universities is crucial for Israel's economic development and national security. A thriving academia will result in a stronger and more secure State of Israel'.⁴⁷ So long as Israel's "security" is negatively correlated with the rights and welfare of the Palestinian population, this arithmetic ensures TAU's successes will continue to be linked to the increasingly brutal, increasingly "high-tech" oppression of the Palestinians; an investment in TAU is an investment in this oppression and the war crimes it involves.

This brief survey of TAU's direct involvement in the production and development of the theoretical and material infrastructure for Israel's armed forces is necessarily limited to a few selected examples. It is felt that these examples serve to illustrate the extent of the many institutional, personal, and economic ties which bind TAU

directly to the military and defence industries. These ties involve multiple departments ranging from mechanical engineering to philosophy; and they place MAFAT, the Ministry of Defence, the National Security Council, the Space Agency, the General IDF Command, and Military Intelligence in constant collaborative contact with top Israeli scientists and scholars. Moreover, the pronounced intersecting of competences and goals which has been described here is not a subject of concern, and is certainly not concealed by TAU officials – rather, it is parsed as a source of institutional pride and as a reflection of TAU's commitment to the military.

As already noted, there is nothing unique about state institutions being implicated in the pursuit of state objectives, including security-related objectives. However, the intense military mobilisation of Jewish-Israeli society, its constant-war footing, and the closely related knowledge circles which compose the defence R&D community in this comparatively small country, together amplify the role played by academic institutions in military affairs. TAU, as the largest university in Israel is, unremarkably, at the centre of this militarisation, and the above examples are intended to draw attention to this fact. Ultimately, as this brief survey has shown, this collusion with the military amounts to the commissioning of war crimes and crimes against humanity.

¹ TAU's definition as a "Jewish" institution is a recurrent feature of its public image. For instance, its English language website describes TAU as 'the largest university in Israel and the biggest Jewish university in the world'. See: <http://www.tau.ac.il/intro-eng.html> (Accessed Jan 29th 2009).

² Of several studies of Tel Aviv's role in the colonisation of Palestine, Mark Levine's *Overthrowing Geography: Tel Aviv, Jaffa, and the Struggle for Palestine, 1880-1948* provides a useful historic account of the city's emergence as a centrepiece colonial project, while the work of Daniel Montrescu or Tarek Ibrahim on contemporary gentrification and neoliberal property development in Jaffa each describe the ongoing processes of ethnic cleansing which attend the city's growth today. Levine, Mark, *Overthrowing Geography: Tel Aviv, Jaffa, and the Struggle for Palestine, 1880-1948*, University of California Press, 2005; Ibrahim, Tarek, *Unprotected Citizens: Amidar Public Housing Company Threatens to Evict 497 Palestinian Families in Jaffa-Tel Aviv*, Arab Association for Human Rights, May 2008. English version available online: <http://www.arabhra.org/HraAdmin/UserImages/Files/JavaEvacuationReportFinalEng.pdf> (accessed Jan. 29th 2009); Montrescu, Daniel, "The Palestinian Community in Jaffa: A Social-Planning Report," *Shatil – Mixed Cities Project*, March 2007. Hebrew version available online: <http://yaffastruggleh.files.wordpress.com/2007/12/report-on-jaffa.pdf> (accessed Jan 29th 2009).

³ Katz, Y., "Reservists Called Up For Lebanon Strike" *Jerusalem Post*, July 12th 2006.

⁴ *Electro-Optika B'Sadeh HaKrav Ha'Atidi* (Electro-Optics in the Battlefield of the Future), Science, Technology, and Security Workshop no. 40, Tel Aviv University, Dec. 20th, 2007.

⁵ Course description: online at <http://spirit.tau.ac.il/security/content.asp> (accessed Jan 12th 2009)

⁶ Avraham Katzir "From The Lebanon War to the Battlefield of the Future", presentation at *Electro-Optics...* Op. Cit.

⁷ Haim Russo, "70 Years of Electro-Optics in Israel" presentation at *Electro-Optics...* Op. Cit.

⁸ In *Tel Aviv University Review*, Winter 2008-9, Tel Aviv: TAU Press, p. 4.

⁹ Background on the scale, trends, and history of the Israeli arms industry can be found in a range of authoritative sources. Recent data and commentary includes: Grant, Ian, "Israel's Security Crucible," *InfoSecurity Today*, March-April 2006, pp. 28-32; Alon, Gideon, "Israeli Defense Exports Make up 10% of the World's Total," *Ha'Aretz*, March 2nd 2004; Persico, Oren, "Arms Unto the Nations," *Globes* (Online Edition), April 29th 2003. Online: <http://www.globes.co.il/serveen/globes/DocView.asp?did=685987&fid=1724> (accessed Sept. 14th 2007); Katz, Yaakov, "2006: Israel Defense Sales Hit Record" *Jerusalem Post*, Jan. 1st 2007.

¹⁰ In *Tel Aviv University Review*, Op. Cit. p. 4.

¹¹ On OTRI see Weizman, E., *Hollow Land: Israel's Architecture of Occupation*, London: Verso, 2007, pp. 187-193.

¹² E.g.: Joint seminar on asymmetrical warfare, in conjunction with IDF's National Security College (Dec. 2006); Conference on different dimensions to the Second Lebanon War, in conjunction with the IDF Northern Command (July 2007); or Travel Warnings: Real or False Alarms?, a seminar in conjunction with the Counter-terrorism Bureau of the National Security Council (Sept. 2008). All events data from INSS site: <http://www.inss.org.il> (accessed Jan 12th 2009)

¹³ Gabriel Siboni (n.d.) <http://www.inss.org.il/programs.php?cat=56> (accessed Jan 12th 2009)

¹⁴ INSS Conference: "Security Challenges of the 21st Century", INSS, Tel Aviv University, Dec. 17th-18th. Proceedings available online: <http://www.inss.org.il/events.php?cat=172&incat=&read=2450> (accessed Jan 12th 2009)

¹⁵ Course information online: <http://spirit.tau.ac.il/government/SciTech.asp> (accessed Jan 12th 2009)

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ *Tel Aviv University Review*, Op. Cit., p. 4.

¹⁹ Kasher, A. & Yadlin, A., "Fighting Terror: The View From Israel" *Pacem*, 8(1), 2005, pp. 41-48. See also: Kasher, A. & Yadlin, A., "The Military Ethics of Fighting Terror: An Israeli Perspective" *Journal of Military Ethics*, 4(1), 2005, pp. 71-76.

²⁰ See for e.g., Kasher, A. & Yadlin, A., "Assassination and Preventive Killing" *SIAS Review*, 25(1), 2005, pp. 41-57

²¹ First, in 1972, for the development of an airborne weapons delivery system for the air force's F-4E fleet; second, in 1976 for work on so-called C4 (Command, Control, Communications, Computers) fighter operating systems.

²² See for e.g., Rapoport, M., "Italian Probe: Israel Used New Weapon Prototype in Gaza Strip" *Ha'Aretz*, 11th Oct. 2006. Online version: <http://www.haaretz.com/hasen/spages/772933.html> (accessed Dec. 2008); Cook, J., "Is Gaza A Testing Ground for Experimental Weapons?" *Dissident Voice*, Jan 13th 2009. Online: <http://www.dissidentvoice.org/2009/01/is-gaza-a-testing-ground-for-experimental-weapons/> (accessed, Jan 12th 2009).

²³ A January 2007 English-language telephone interview with Ben-Israel on the need to invade Gaza is available online: <http://www.isracast.com/article.aspx?ID=640&t=Gaza-invasion---pros-and-cons> (accessed Jan. 12th 2009).

²⁴ In Shavit, A., "Going Forward By Moving On" *Ha'Aretz*, 24th Dec. 2008. Online version: <http://www.haaretz.com/hasen/spages/1049444.html> (accessed Jan. 12th 2009).

²⁵ See "Kadima MK Ben-Israel: Barak is Israel's Worst Minister Ever" *Ha'Aretz*, 13th Sept. 2008. Online version: <http://www.haaretz.com/hasen/spages/1020683.html> (accessed Jan. 12th 2009).

²⁶ Quoted in Raghavan, S., & Witte, G., "Israel Forces Enter Gaza Strip: Invasion Offers Benefits to Both Sides But Also Risks" *Washington Post*, Jan. 4th 2009. On Ben-Israel's renewed respect for Barak, see Somfalvi, A., "Kadima MK Ben-Israel: Gaza Op to Restore Deterrence" *Yedioth HaAchronot*, Jan. 5th 2009. Online (YNET) version: <http://www.ynetnews.com/articles/0,7340,L-3650744,00.html> (accessed Jan. 12th 2009).

²⁷ Ben-Israel, Y., "New Rules of Play", *YNET*, Jan. 30th 2009. Online version: <http://www.ynetnews.com/articles/0,7340,L-3664189,00.html>

²⁸ *Tel Aviv University Review*, Op. Cit., p. 1.

²⁹ Ibid. p. 2.

³⁰ Ibid. p. 4.

³¹ Ibid.

³² Ibid.

³³ Siboni, G., "Disproportionate Force: Israel's Concept of Response in Light of the Second Lebanon War", *INSS Insight* (74), Oct. 2008.

³⁴ Thus, the northern commander, Maj-Gen. Eisenkot told Israeli journalists that what 'happened in the Dahiya quarter of Beirut in 2006 will happen in every village from which Israel is fired on [...] We will apply disproportionate force on it [...] and cause great damage and destruction there. From our standpoint these are not civilian villages but military bases.' In "Israel Warns Hizbullah War Would Invite Destruction" *YNET*, Oct. 3rd 2008.

³⁵ Eiland, G., "The Third Lebanon War: Target Lebanon" *INSS Strategic Assessment*, 11 (2), Nov. 2008, pp. 9-17, p. 16.

³⁶ Ibid.

³⁷ Ibid, p. 15, p. 17.

³⁸ Siboni, G., "Disproportionate Force: Israel's Concept of Response in Light of the Second Lebanon War", *INSS Insight* (74), Oct. 2008.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ For a legal discussion on Israel's targeting of civilian infrastructure in Lebanon during the 2006 war, see *Israel/Lebanon Deliberate Destruction or "Collateral Damage"? Israeli Attacks On Civilian Infrastructure*, Amnesty International, Report ID: MDE 18/007/2006. Available online at: <http://www.amnesty.org/en/library/info/MDE18/007/2006> (Accessed Jan. 12th 2009).

⁴² At the time of writing, comprehensive data remains hard to obtain. These figures are from the independent Palestinian Centre for Human Rights (PCHR), Gaza's leading rights monitoring organisation. See http://www.pchrgaza.org/files/W_report/English/2008/22-01-2009.htm (Accessed Jan. 26th 2009)

⁴³ Curt Goering, Deputy Executive Director, Amnesty International USA to Sec. Of State Condoleezza Rice, Jan. 16th 2009. Available online: <http://www.amnestyusa.org/pdf/livnivisit.pdf> (Accessed Jan 23rd 2009).

⁴⁴ Falk quoted in "UN Fears "Systematic War Crimes" During Gaza Offensive" *Yahoo News*, Jan. 22nd 2009.

Online: http://news.yahoo.com/s/afp/20090122/wl_mideast_afp/mideastconflictgazaunrights_20090122210919

⁴⁵ See Feldman & Blau "How IDF Legal Experts Legitimized Strikes Involving Gaza Civilians" *Ha'Aretz*, Jan. 22nd 2009. Online Version: www.haaretz.com/hasen/spages/1057648.html (Accessed Jan. 22nd 2009).

⁴⁶ Ilani, O., "Lecturers Say IDF Officer Who Justified Gaza Strikes Should Not Teach Law" *Ha'Aretz*, Jan. 26th 2009. Online Version: <http://www.haaretz.com/hasen/spages/1058847.html> (Accessed Jan. 26th 2009).

⁴⁷ Ibid p. 12