IST Area 2005 – Conclusions

From a technological point of view the material of the IST Area indicates that there is a blade industry in this area. Previous studies have demonstrated that blade technology shows a significant increase after Level VI at the site (Conolly 1999, 75), whereby this year's IST Area can be dated either to Level VI or later phases. The chipped stone analysis focused on five different contexts, and the remainder of the material was not studied as it derived from surface contexts. When we consider the material technologically from these five contexts, it is seen that prismatic blade production from unipolar technologies is dominant. However, the knapping chronology and the raw material usage economy of this technology will be clarified by further studies in the following years. Points, retouched blades and flakes, scrapers, splintered pieces and carving tools were identified by typological analysis. However these results do not yet clearly indicate the function of the spaces investigated.

With regard to the variety of raw materials in this area, it appears that obsidian was supplied from the southern Cappadocian sources of Nenezi and Göllü Dağ. Of great interest, is that an obsidian type similar to the Eastern Anatolian obsidian was recognized in this area (yet to be proven by chemical analysis). This data forces us to ask in what form did these various obsidians arrive at the site and can we witness a preference of the raw material depending on the levels and/or technology? In the following years we aim to clarify these questions as part of the larger obsidian sourcing programme at the site (cf. Carter *et al*, *in press*).

Team Poznan – *Tristan Carter*

The 2005 Team Poznan [TP] excavations generated 959 pieces of chipped stone from a range of contexts, not all of them Neolithic (see below), of which 931 were obsidian and 28 'flint' (Table 7), the latter mainly in the form of tan/brown limnic-quartzites. This season's work provided us with our first assemblages of Level I and II date. Most of this material came from secondary contexts, specifically dump, midden and infill deposits, all of which produced much the same kind of assemblage in terms of relative density of finds (**Figure 4), its overall freshness (a few worn/scratched pieces) and the largely fragmentary state of individual pieces (only smaller, sturdier blanks being recovered complete).

	NUMBER				WEIGHT (g)			
	Obsidian		'Flint'		Obsidian		'Flint'	
Dry Sieve	713	74.35%	27	2.82%	579.61	85.5%	70.58	10.41%
Heavy Residue	218	22.73%	1	0.1%	17.409	2.57%	10.27	1.52%
Total	**931**	**97.08%**	**28**	**2.92%**	**597.19**	**88.1%**	**80.85**	**11.93%**

Table 7: Chipped stone from TP excavations 2005 by raw material and sample (data to be treated with care as derives all contexts, both Neolithic and post-Neolithic).

Other types of feature included a fill (11740) surrounding a cluster of human burials in Space 248; the 101 litres of dry sieved soil from the deposit produced only seven pieces of obsidian. Five were broken prismatic blades, the products of more than one knapping tradition; all had been used while four were retouched. One of the blades is particularly wide (2.53cm) and appears to come from an opposed platform (bipolar) technology. There was also a, non-cortical flake (used), plus a broken blade-like flake (unused). While the implements seem to display a high incidence of use and retouch, neither their state, nor form is suggestive of grave goods *per se*; instead the material is considered to have been redeposited from the midden that the burials were cut into.

Of particular interest was our first glimpse at an 'ashy rake-out' deposit from the uppermost strata, specifically (12237) of Level I date (Table 8). Our main interest in studying this deposit (it was prioritized) was due to the fact that these contexts were commonly some of the most productive units encountered within the buildings of the South Area (Levels X-VII). High quantities of obsidian microdebitage represent a core-component of those artefact rich deposits that comprise these structures' 'dirty areas', intermixed with ash, charcoal, other botanical material, fragments of bone from food and craft processing located next to the ovens and fire installations. However, the ashy-rakeout from TP was something of a disappointment when contrasted with these earlier examples, producing only 32 pieces of obsidian from 21 litres of soil (>1mm, >2mm and >4mm samples combined [Table 9]). Indeed,

the unit was not even particularly productive in the context of the other Neolithic deposits excavated by TP this season (**Figure 5). With regard to the samples from the >1mm and >2mm meshes, the unit was either poorer than most other units from TP this year or in the mid-range; it is only the >4mm sample that is notably productive. This is the opposite of what one tends to find with ashy-rakeout assemblages in the South Area, where the tiny shatter from knapping activities predominates, often comprising scores of pieces, sometimes in the hundreds (As with some of Building 17's ashy-rakeouts, most notably units **5021** and **5041**). In terms of the objects themselves, the >4mm sample included fragmentary pressure-flaked blades, a reduced/reworked thick (non-locally made) blade with remnant natural surface (a quarry product?), and a series of small and relatively fresh flakes. Overall the assemblage is structurally quite comparable to those from other types of contexts encountered this year.

Unit	Flot.	Vol.	Fraction	%	Weight	Wgt/L	No.	No/L
12237 - ashy rakeout	#2	21	>1	25	0.01	0.00	2	0.38
12237 - ashy rakeout	#2	21	>2	50	0.19	0.02	13	1.24
12237 - ashy rakeout	#2	21	>4	100	8.66	0.41	17	0.81

Table 8: Quantity of obsidian recovered from heavy residue sample, unit 12237 (Level 1).

Unit	Fraction	%	Vol. (L)	No.	No. / L	Wgt. (g)	Wgt. / L
11904 - bin fill	>1mm	12.5	26	1	0.31	0.01	0.00
11907 - bin fill	>1mm	12.5	26	3	0.92	0.01	0.00
11911 - bin fill #2	>1mm	100	1.5	1	0.67	0.01	0.01
11911 - bin fill #4	>1mm	100	0.5	3	6.00	0.02	0.04
11923 - bin fill	>1mm	25	15	5	1.33	0.04	0.01
Unit	**Fraction**	**%**	**Vol. (L)**	**No.**	**No. / L**	**Wgt. (g)**	**Wgt. / L**
11904 - bin fill	>2mm	50	26	0	0.00	0	0.00
11907 - bin fill	>2mm	50	26	0	0.00	0	0.00
11911 - bin fill #2	>2mm	100	1.5	0	0.00	0	0.00
11911 - bin fill #4	>2mm	100	0.5	1	2.00	0.01	0.02
11923 - bin fill	>2mm	100	15	15	1.00	0.23	0.02
Unit	**Fraction**	**%**	**Vol. (L)**	**No.**	**No. / L**	**Wgt. (g)**	**Wgt. / L**
11904 - bin fill	>4mm	100	26	0	0.00	0	0.00
11907 - bin fill	>4mm	100	26	8	0.31	1.32	0.05
11911 - bin fill #2	>4mm	100	1.5	0	0.00	0	0.00
11911 - bin fill #4	>4mm	100	0.5	1	2.00	0.12	0.24
11923 - bin fill	>4mm	100	15	5	0.33	3.96	0.26

Table 9: Quantities of obsidian from bin fill units within **F.2004**.

While we presently only have a single example of an ashy rakeout deposit from these upper strata, I suggest that the data from (12237) represents evidence for the radical reorganization of chipped stone production at Çatalhöyük in the latter part of the Early Neolithic sequence. It has already been suggested by Conolly (1999) that post Level VIB the working of obsidian became a far more exclusive affair than before, concentrated amongst only a few of the structures, as opposed to the building-by-building level of production we witnessed in Levels X-VII during 1995-99 (Carter, Conolly and Spasojević *in press*). Unfortunately these data exist in isolation; it is frustrating that we have yet to encounter any clear ashy-rakeout deposits from the 4040 Area to investigate the question more generally in a 'post-Level VI' context. It is hoped that the situation will be rectified in the 2006 season.

The TP chipped stone - technology and typology

The obsidian assemblages from the TP Area (Levels I-II) are typical of what one finds at Çatalhöyük during the latter part of the Early Neolithic sequence (The distinction allegedly appearing post Level VIB according to

Conolly (1999)), i.e. dominated by prismatic blades and their related production debris. Most of the TP blades appear to be pressure-flaked, quite narrow and originally c.6cm long, though there are also some notably wider products that likely derived from a different pressure-flaked tradition. There are also a few blades from a skilled percussive technique. Common to all of these blade technologies is the fact that they employed single platform cores [unipolar] and recurrently cleaned the core's platform/lip overhangs by flaking – as attested by the fact that the proximal sections of virtually all of these blades have their lips removed. Thus we have evidence for parallel modes of knapping, albeit sharing some common technical mechanisms, the inference being that these may have all been locally performed industries. The reasons these blade traditions existed in tandem is an intriguing one that requires the team's consideration between now and the next publication. In turn, there are a few notably wider obsidian blades that likely come by from an opposed platform [bipolar] technology (e.g. 12200.A13, some 2.36cm wide), as attested previously in Level II contexts by Bialor (1962, fig. **12:5). Finally, the TP material from 2005 also included one of our burin spalls / 'edge blades' (12200.A36), (Industry 6 in the upcoming report – Carter, Conolly and Spasojević *in press*). i.e. a linear blank knapped from the edge of a retouched implement (usually the margin of a projectile, sometimes a scraper). This rather rare practice is attested in assemblages from the earliest levels at the site; it is uncertain at present as to whether this piece from TP indicates that the 'industry' continues throughout the East mound sequence. The habit of reducing / reworking projectiles receives further discussion at the end of this report.

The existence of parallel blade traditions, with pressure-flaking techniques and percussion products existing in parallel is not something we uniquely associate with the Level I-II assemblages of TP; indeed it appears to be a common feature of our post-Level VIB material (see below). Some distinctive features of these periods might be suggested, however. Firstly, pressure-flaked products seem to dominate these assemblages, with percussion products rarer than before. Secondly, a Level I pit produced the first genuine crested blades I have ever seen at Çatalhöyük (12200.A9); perhaps here we have evidence for a distinct Level I-II mode of core preparation/blade initiation within a pressure-flaked process.

Retouched tools seem to be relatively rare within the Level I-II assemblages; where attested, they - unsurprisingly – are made on blades, usually modified by simple linear retouch, with a few notched, denticulated, or backed pieces. Flake tools are even fewer, with a single scraper made on a part-cortical flake from a Level II context (12262.A1). Perhaps most surprising, is the fact that projectiles are virtually unknown from the 2005 TP assemblages, with a single, much reduced medial section of a bifacial point from floor layer (10977).

Turning to the Level I-II 'flint' assemblage, the material was dominated by a range of limnic-quartzites, usually tan/brown in colour. The assemblage includes a few narrow, unipolar prismatic blades, likely the product of a percussive technique; there are also a few mainly non-cortical flakes of the same raw material that conceivably relate to the on-site manufacture of these products. The assemblage lacks cores and produced only a single piece of limnic-quartzite from heavy residue, indicating that while the prismatic blades may have been produced on-site at this time, there is little evidence for knapping within those spaces investigated this year – unless one envisages the removal of blades from a fully prepared and part-worked core (though even this should generate more shatter). The assemblage also included one larger limnic-quartzite blade measuring 6.47cm long that relates to a different tradition, perhaps non-local; the piece had been notched and backed and was heavily burnt.

Once again the TP excavations produced a not inconsiderably quantity of chipped stone from mixed and post-Neolithic deposits, material that provides us with a source of frustration and very little else. Invariably one of our nicest individual objects came from just such a context, namely the hilt of a dagger made from a large of tan limnic-quartzite prismatic blade (12203.X1) from the fill of a Byzantine grave. The blade had been shaped with steep retouch along the edges and around the base, while its middle ridges and central dorsal scar seem to have been deliberately smoothed / polished. Daggers are rare at Çatalhöyük, produced on non-local blades, whose shaping often involved the time-consuming and delicate process of bifacial pressure-flaked retouch; as such these implements are considered prestige goods of their era, no doubt intended for display as much as use. The polished surface of the blade is interesting, as it suggests that the dagger had been in circulation for a long time, the polish likely a result of its contact with a leather cover (cf. Grace 1990), i.e. from being taken out to be brandished/used

and then re-sheathed on many an occasion. Parallels for this dagger are known from Levels VI and VIII (Mellaart 1963, 99, pl. XXVII,a, 1964, Figs. 46, 52,16), while the most recent excavations produced a bifacially worked example from the BACH excavations of Building 3 (Conolly 1997).

Summary of the TP Level I-II assemblage (2005)

In keeping with the chipped stone assemblages from every other level at Çatalhöyük obsidian is the dominant raw material from the Level I-II deposits thus far excavated (Table 7). In turn, the material includes precious little cortical debris indicating that the community was not in the habit of procuring raw nodules. As with the post-VIB assemblages from elsewhere on the site, prismatic blade industries dominate, with a number of traditions existing in tandem, including both pressure-flaked and percussion technologies, primarily from unipolar cores with the distinctive practice of lip removal by flaking. We also have a number of core-tablets - the distinctive rejuvenation pieces that are also known from later Early Neolithic assemblages elsewhere on the site.

Where the TP assemblages seem to differ from the later material in the 4040 Area is that pressure-flaking seems to have a more dominant role in blade production, with fewer diagnostic percussion products. The pressure-flaked tradition(s) of Level I-II also may have involved the process of cresting to initiate blade removal from the core; this is the first time that this mechanism has been seen by the author at the site and may be diagnostic of the uppermost levels. In turn, while opposed platform [bipolar] products were always a minority component of the post-VIB assemblages, they seem to be even less common in Level I-II contexts. Moreover, we seem to have fewer retouched pieces and a more limited repertoire of retouched tools, with a virtual absence of points and scrapers, in marked contrast to the 4040 assemblages of the past two years which have produced significant numbers of projectiles (see below).

This year's work in the TP Area has also been important for providing data that suggests a distinct spatial organization of production to that witnessed in pre-Level VIB structures (the intervening levels remaining something of a mystery at present). While the TP obsidian included a few cores, mainly in an exhausted state, we have little indication that blade manufacture was occurring in that part of the building that we have previously associated with production, i.e. the area around the ovens and fire installations. While quantities of obsidian were recovered from each of the heavy residue samples from the Level I ashy-rakeout (12237), the amounts involved were not dissimilar to those from other deposits (infill, midden etc.) and significantly less than commonly witnessed in earlier ashy-rakeouts.

In summing up this year's report on the TP a cautionary note is warranted, as it remains that this part of the site has been heavily truncated by later activities (not least human burials) and the scale and range of the Neolithic deposits thus far encountered is relatively limited. The ashy-rakeout mentioned above is the sole example of this kind of deposit we have from this area, nor do we have any comparanda from the 4040 Area at present. Similarly our apparent lack of projectiles might reflect a bias in the archaeological record, i.e. *maybe* we have been digging in the wrong places (of this I am less sure). We look forward to next year's work with the hope that some of these issues may be resolved.

The South Area – *Tristan Carter*

While work in the South Area in 2005 saw the completion of Building 42 and the opening up of Level V features, the archaeology of this part of the site was seen to have suffered greatly from post-Neolithic animal disturbance that had served to mix the deposits by introducing later material, including Byzantine pottery. Thus, only a limited amount of work was undertaken on what were quite often large assemblages of chipped stone, the badger burrows having dug into artefact rich midden deposits.

Building 42, Space 202

The excavation of Building 42, a Level IV structure first exposed in 2004 was completed this season; the chipped stone from these remnant units essentially replicated that generated the previous year. One piece of note was a mid-segment of a unifacially retouched projectile made on a blade that had been reduced after having broken, with