DISCUSSION #2 Summarized by Harriet F. Beaubien^{**}

Discussion proceeded in a practical vein with further details offered on aspects of cellulose ethers and the use of paper-based fills.

For poorly bound substrates and tenting paint layers that are sensitive to aqueous solution, Klucel G (hydroxypropyl cellulose) is used as a preliminary consolidant because it may be dissolved in various organic solvents. Several participants noted Klucel's instability over time and did not advocate its use alone [VG,SRP,PH]. Once dry, further consolidation and manipulation of tented paint may be safely carried out with methyl cellulose (a stable material); Hatchfield recommended successive applications (where needed) of a mixture in 1:1 water:ethanol (approximately 0.5% solution). It was noted that as matte an appearance can be achieved with methyl cellulose as with the hydroxypropyl cellulose [SRP].

A question arose about the adhesion of paper pulp fills to porous substrates. Several participants recommended the use of Saran Wrap as a barrier during the initial fabrication of the fill [JG,JP]. Wet pulp, pressed into the area of loss, can then be removed easily from the substrate and the barrier discarded. After drying, it is adhered in place with an appropriate adhesive.

For organic substrates that experience movement, tissue paper fills are best prepared for losses or splits when they are at their maximum size [JT]. The water-cut fills are adhered in place while slightly damp, tautening to fit as they dry. These will relax slightly when the substrate swells, but will accommodate its maximum shrinkage in dry conditions. The surfaces of these fills may also be easily ingilded or inpainted with solvent-based materials. Another variation was offered for the use of tissue fills in shallow losses [CA]. The tissue is feather-cut to fit, coated on both sides with PVA-AYAA and inpainted on one side. The fill may then be adhered in place with a tacking iron to prevent any movement that the use of solvents might cause.

Contributors to the discussion (listed alphabetically); presentors appear first, marked by an *asterisk:

PH	*Pamela Hatchfield	MM	*Michele Marincola
JP	*Jerry Podany	JS	*Jack Soultanian
CA	Christopher Augerson	VG	Virginia Greene
JG	John Griswold	SRP	Shelley Reisman Paine
JT	Jonathan Thornton		

^{**} Smithsonian Institution, Conservation Analytical Laboratory, Museum Support Center, Washington, D.C. 20560-0001