

DISCUSSION CONCLUDING AAS 11-663

Neil deGrasse Tyson said many interesting points were made by Paul Gabor, but there appeared to be a lack of distinction between celebrations that might be made for the “regeneration of time” versus those celebrations that are more explicitly linked to astronomical phenomena. Tyson noted that the January 1st celebration has no astronomical significance yet that does not diminish the revelry that occurs in Western cultures. Tyson asked why there should be concern about the decoupling of timekeeping devices from an astronomical measure given that many annual celebrations are already unassociated with astronomical phenomena. Noting that there are other societal, cultural, and economic factors that drive such celebratory activity, should a distinction at least be made between these two types of celebrations? Paul Gabor replied that his New Year’s Eve example was to illustrate the forces behind such things, not necessarily an example of how they end up within the timekeeping schemes we have. It was just an example of an existing widespread ritual and the dynamics behind quite a number of things. The subject of the “regeneration of time” doesn’t directly address the issue of decoupling civil timekeeping from Earth rotation and its mention did not intend to address that issue; rather, the point was that symbolic sub-strata are present in timekeeping. Gabor said that it may not have been the most direct example but it was the example that he felt was perhaps most telling when it comes to these more “mystical aspects”.

Tyson noted that the seven-day week has no astronomical relevance yet there seems to be agreement that there is strong inertia for that to never change. The week offers its own level of “regeneration of time”—each week is a fresh start. Tyson did not necessarily see a strong urge to recouple back to a cosmic rhythm, given that societies are perfectly comfortable celebrating events in time that are non-cosmic. Gabor responded that Tyson’s point was now clearer to him. He replied that while it is true that we quite enjoy the celebration of the New Year, the symbolism is no longer fully there. New Year’s Day is an example of a celebration that became badly decoupled from reality and the symbolism no longer works quite properly. Tyson responded that the celebration seemed as popular as ever, to which Gabor replied that it definitely isn’t. It was celebrated much longer and in much more complicated ways—in the Middle Ages the festivities continued for twelve (12) days—and today only very tiny vestiges of those revelries still exist. Terrett said that January 1 may be an arbitrary date but the interval between successive New Year’s Days is not arbitrary. Seaman added that “rhythm” was mentioned by Gabor and this seems to be a more important aspect than precise solar position.

McCarthy thought that the discussion was “missing the point here.” He said that the most ancient things we can find in timekeeping regard the month and year as symbols of harvest (for the year) and cycles of extra light and dark (for the month). He added that the oldest bit of timekeeping paraphernalia discovered so far kept track of the days of the month. There is always a question of why that was done, but “as near as we come up with” it was done because “an extra bit of light” was available for hunting or whatever else needed to be done. Gabor replied that was “a very utilitarian attitude;” the lunar cycle has been primarily and obviously linked with the feminine and that many of these things seem to be purely ritualistic. McCarthy countered that these are not so much rituals but are conceived only after a practical need has been established, *e.g.*,

when to plant and when to harvest, with a celebration developing around a successful harvest. Gabor responded that New Year's celebrations (regeneration of time) were apparently done long before the development of agriculture. McCarthy said he would have to see that [proven].

George Kaplan asked if significant celebration occurred when the New Year was maintained closer with vernal equinox. Gabor said no, adding that the establishment of New Year's Day close to the vernal equinox was purely administrative and that celebrations of a change of year have been traditionally linked with the winter solstice. Nevertheless, celebrations at other times of year have been linked with the New Year; for example, the harvest festival is a type of New-Year's celebration as well.