COMMENTS ON "THE ABSOLUTE ANABELIAN GEOMETRY OF CANONICAL CURVES"

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June 2012

(1.) There are a few notational errors in the statement of the condition $(\dagger_M)$ of Lemma 3.4, which, however, *do not affect the proof* of Lemma 3.4 in any substantive way. The subquotient "$\mathbb{G}^2(M)$" (respectively, "$\mathbb{G}^{-1}$") should have been denoted "$\mathbb{G}^{-2}(M)$" (respectively, "$\mathbb{G}^1$"). The subquotient $\mathbb{G}^{-2}(M)$ (respectively, $\mathbb{G}^1$) is isomorphic to the tensor product of an unramified module with a Tate twist $\mathbb{F}_p(-2)$ (respectively, $\mathbb{F}_p(1)$). That is to say, there is a *sign error* in the Tate twists stated in $(\dagger_M)$. Finally, in order to obtain the desired *dimensions* over $\mathbb{F}_p$, one must replace the cohomology module

$$\text{“}M \stackrel{\text{def}}{=} H^1(\Delta_{X^{\log}}, \mathrm{Ad}(V_{\mathbb{F}_p}))\text{”}$$

by the submodule of this module consisting of elements whose restriction to each of the cuspidal inertia groups of $\Delta_{X^{\log}}$ is *upper triangular* with respect to the filtration determined by the *nilpotent monodromy* action on $V_{\mathbb{F}_p}$ [i.e., by the cuspidal inertia group in question]. That is to say, an elementary computation shows that the operation of restriction to this submodule has the effect of *lowering* the dimension of $\mathbb{G}^{-2}(M)$ from $3g - 3 + 2r$ to $3g - 3 + r$, as desired.