As before, we have the following property.

Property 2. ILFM, for M_e, is neutral w.r.t to the local preferential attachment effect.

Proof: The proof is identical to the first part of the proof for Property 1.

The definition of the local degree we have used does not directly translate to M_g as it is based on the knowledge of ~~F~~. One can nevertheless define an expected local degree for M_g ~~as follows~~ as:

$$gd_{i,\ell}^{(p)} = \mathbb{E}_{F,\Phi}\,[d_{i,\ell}^{(p)}]$$

$$= \iint_{F,\Phi} P(F|M_g)\,P(\Phi|M_g)\,d_{i,\ell}^{(p)}\,dF\,d\Phi$$

A notion of local preferential attachment for M_g can then be defined on the basis of this expected local degree.

Definition (ILFM - local preferential attachment; M_g) We say that ILFM in M_g satisfies the local preferential attachment effect iff for any indexing, for any node i $(1 \leq i \leq N)$, for any step p $(1 < p < N)$; $\exists\, \varepsilon \in]0,1[$ s.t. $P(gd_{i,\ell}^{(N)} \geq x+\varepsilon \mid gd_{i,\ell}^{(p)} \geq x; M_g)$ increases with x, $x \in]0,N[$.

[INCLUDE A ~~NEW~~ § ON LINK TO CONTINUOUS BURSTINESS]

~~As before~~ ~~By definition~~, One has ~~...~~ $\forall\, \varepsilon \in]0,1[,\ x \in]0,N[$:

$$P(gd_{i,\ell}^{(N)} \geq x+\varepsilon \mid gd_{i,\ell}^{(p)} \geq x; M_g) = 1 - P(gd_{i,\ell}^{(N)} = x \mid gd_{i,\ell}^{(p)} = x; M_g)$$

$$= 1 - P(g_{i,p+1} = 0, \ldots, g_{i,N} = 0 \mid M_g)$$