Public News Bots? Creating Networked News Time in Automated Journalism

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If responsible journalism gathers audiences at times that "matter," then the ethics of the networked press depend, in part, upon how it understands and organizes time. That is, the press's network of tools, people, institutions and practices can be said to serve "public time" (Sharma, 2013) if it structures or interrupts "social time" (Durkheim, 1912/1954) in ways that enrich public spheres. One way to understand the *public* value of the networked press is to evaluate the infrastructures governing its rhythms and interruptions.

News bots—software that senses and samples information environments to algorithmically produce or distribute stories—are increasingly part of such temporal news networks. *The New York Times*'s "4th Down" bot analyzes the real-time judgments of National Football League coaches, and WNYC's "Nailbiter Bot" tweets when NCAA games are coming to an end with close scores. NPR News recently switched is primary Twitter account from algorithmic to manual control after finding that audiences engaged more with stories when humans (not bots) decided when to tweet. And, under the byline of its programmer, the *Los Angeles Times*'s "QuakeBot" writes and tweets stories analyzing USGS earthquake data almost instantaneously.

Bots like these add a temporal dimension to experiments in automated news production (Clerwall, 2014; van Dalen, 2012). The semi-autonomous nature of news bots begs the question of how programmers *predict* when stories will be timely, appropriate, and publicly valuable – how designers encode into infrastructure assumptions about when and why audiences should be convened.

Combining scholarship on news organizations' temporal dynamics (Orlikowski & Yates, 2002; Reich & Godler, 2014; Saltzis, 2012; Schudson, 1986) with actor-network theory (Latour, 2005; Turner, 2005; Weiss & Domingo, 2010), I develop a concept of "networked news time." I empirically examine this concept through a critical reading of one news bot infrastructure—the *Los Angeles Times*'s QuakeBot— to show how design assumptions, algorithmic rules, selective data processing, network deployment, and narrative outputs work together to create networked news time. Where do assumptions about time appear in QuakeBot's code? When does QuakeBot know enough to publish a story?   What time-sensitive information is encoded into the stories QuakeBot produces? How does QuakeBot depend upon other actants' timings (*e.g.*, the LA Time, the USGS, Twitter) When are QuakeBot stories revised?

If contemporary journalism depends upon *networked* actants to gather audiences at moments that matter, how does a news bot and its network position determine *when* audiences attend to news?

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