

Modern Tulu Unicode: Key Concerns for Recognition, Integration, and Digital Sustainability

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Section	Question
1. Script Identity & Linguistic Justification	1. Since Modern Tulu exhibits a distinct graphemic inventory, phonemic structure, and numerical system compared to Tigalari, what are the risks of classifying it under the same Unicode range, and why does this justify a standalone encoding?
	2. How does Unicode distinguish between historically dormant scripts and those that are currently active in real-world digital communication, education, and publishing?
2.1 Text Rendering, Input, and Display Issues	3. In shared Unicode environments, how does the system determine rendering behavior across platforms when two visually and structurally different scripts—like Modern Tulu and Tigalari—use overlapping code points?
	4. What rendering inconsistencies or glyph-level ambiguities might arise when Modern Tulu and Tigalari content coexist within a single document or digital layout system?
	5. Would bundling Modern Tulu under Tigalari require downstream software layers (keyboards, input methods, font engines) to implement complex overrides or compatibility patches to support basic text entry and readability?
	6. Is there a measurable risk that text authored in Modern Tulu, when transferred via copy-paste across platforms or apps, might be reinterpreted or corrupted due to default Tigalari rendering mechanisms?
	7. To what extent would existing keyboard layouts, input methods, and IMEs (Input Method Editors) struggle with script disambiguation when users attempt to write Modern Tulu in environments configured for Tigalari?
2.2 Encoding, Storage & Application-Level Risks	8. If shared Unicode points are used, how can databases, file systems, or NoSQL document stores maintain script fidelity without resorting to non-standard metadata tagging?
	9. Are there known scenarios where saving Modern Tulu content using Tigalari encoding leads to encoding corruption, lossy display, or system fallback errors in major applications (MS Office, Google Docs, etc.)?
	10. What measures must software developers take to ensure that Modern Tulu content doesn't undergo silent substitution or glyph morphing during script parsing, indexing, or rendering processes?
	11. How would script ambiguity at the Unicode layer affect voice-based applications—like transcription, voice search, or AI dictation—that rely on accurate language detection and phoneme-to-text mapping?

3. Web Indexing, Search Engines & NLP Implications	12. In a shared Unicode configuration, how would search engines like Google or Bing distinguish Modern Tulu websites from Tigalari-script content for proper indexing and ranking?
	13. Could improper classification cause Tulu digital content to be demoted or filtered out as archaic or non-relevant due to its association with a heritage script like Tigalari?
	14. How would this script ambiguity impact large language models (LLMs), neural machine translation engines, and multilingual AI systems in recognizing and adapting to Modern Tulu-specific orthography?
	15. Are there known cases where web crawlers, NLP engines, or AI classifiers misidentified digital content due to Unicode overlap between two linguistically distinct languages/scripts?
4. Artificial Intelligence & Machine Learning Issues	16. In neural translation and AI-based text generation, how critical is script disambiguation for training accurate models? Would Modern Tulu's inclusion under Tigalari corrupt its language modeling results?
	17. Can speech recognition engines like Whisper, Siri, or Google Assistant accurately support Modern Tulu input/output if the underlying script is embedded within a classical Tigalari encoding set?
	18. To what degree will bundling Modern Tulu under Tigalari impede the creation of domain-specific models, chatbots, or digital assistants tailored to Tulu's linguistic patterns?
	19. Could digital voice agents mispronounce or incorrectly parse Modern Tulu due to shared Unicode points and inaccurate phonological mapping derived from the Tigalari script?
	20. Are there comparable examples where AI services (e.g., OCR, TTS, NLP) failed to perform correctly due to Unicode-level misclassification between two culturally or linguistically distinct scripts?
5. Security Issues & Risks	21. If Modern Tulu and Tigalari share the same Unicode space, could scammers use this similarity for phishing or hacking attacks?
	22. Could this cause issues in creating usernames, passwords, and email addresses in Modern Tulu?
	23. What steps can be taken to ensure that Modern Tulu users don't fall into security loopholes because of this Unicode decision?
6. Impact on Education, Government, & Legal Systems	24. How might combining Modern Tulu with Tigalari impact textbook publishing, digital curriculum development, and script standardization in regions where Modern Tulu is part of formal education or community-based learning programs?

	25. Would organizations like ISO, UNESCO, or the Indian government's Ministry of Education recognize and support Modern Tulu linguistically and technologically if it remains classified under a legacy script like Tigalari?
7. Future-Proofing & Unicode's Role in Language Development	26. With the accelerating digitization of Modern Tulu, does Unicode have a policy or precedent for reevaluating script classifications based on growth in usage, technology adoption, and public demand?
	27. If Modern Tulu needs to introduce additional characters, modifiers, or ligatures in the future, would a shared block with Tigalari complicate or delay that process due to compatibility constraints?
	28. Would a lack of Unicode separation impact the eligibility of Modern Tulu for research grants, digital literacy projects, and public-private partnerships in linguistic development?
8. Legal & Policy Considerations for Unicode Inclusion	29. If Unicode rejects a separate block for Modern Tulu, can the government or language organizations legally challenge Unicode's decision?
	30. What weight does Unicode give to recommendations or formal endorsements from national language commissions, ministries, or linguistic academies during its encoding review process?
	31. If the Bhasha Samsthana, government bodies, or public representatives demand a separate block for Modern Tulu, will Unicode have to change its decision?
	32. If Unicode later agrees that Modern Tulu needs its own block, how will the transition be managed without causing problems for existing digital content?