



THE KAZAKHSTAN'S
**MOST ANCIENT
ARCHITECTURE:**

Geoglyphs

*The Album of typical examples
by Dr. Konstantin I.SAMOILOV,
Almaty, 2016*

SUMMARY

Geoglyphs in the Kostanay region were opened in 2007 by Dmitriy Dey. Currently it is (supposedly) the oldest architectural monuments on the territory of Kazakhstan. Objects have different shapes and sizes.

The greatest attention is attracted to the five objects: the "Turgay triradial fylfot" Hill and other hills Complex near Urpek village (50°06'09.82"N, 65°21'40.90"E) - Overall dimensions: 95m x 95m; the "Ushtogay's Square" hills complex (50°49'58.48"N, 65°19'34.70"E) - Overall dimensions: 387m x 394m; the "Ashtasti's Large cross" hills complex (50°13'39.62"N, 66°17'31.15"E) - Overall dimensions: 431m x 386m; the "Ekedyn's cross" hills complex (49°30'44.68"N, 65°51'44.09"E) - Overall dimensions: 249m x 229m; the "Kogai's cross" hills complex (50°22'31.96"N, 65°27'43.98"E) - Overall dimensions: 280m x 212m.

The Graphical representation of these objects allows to analyze the geometry and the orientation. The most famous Kazakh geoglyphs have interesting geometric features:

- **The Geoglyph "Turgay triradial fylfot" Hill near Urpek village.** Position of the north-eastern brand determines the direction to the Geoglyph "Ashtasti's Large cross" hills complex - distance of 67,925 km. Position of the south-western brand determines the direction to the Geoglyph "Kogai's cross" hills complex - distance of 31,189 km.
- **The Geoglyph "Ashtasti's Large cross" hills Complex.** Position of the western broken line determines the direction to the Geoglyph "Kogai's cross" hills complex - distance of 61,281 km. Its center coincides with the direction of the Geoglyph "Turgay triradial fylfot" hills Complex north-eastern brand - distance of 67.925 km.
- **The Geoglyph "Kogai's cross" hills complex.** Its center coincides with directions on characteristic elements of other two geoglyphs: the western broken line of the "Ashtasti's Large cross" hills Complex - distance of 61,281 km; the south-western brand of the Geoglyph "Turgay triradial fylfot" hills Complex - distance of 31,189 km.

The Author expresses his gratitude to Internet resources – <https://www.google.com> ; <https://www.wikipedia.org> – which to provide the ability to collect an information.

This Album generated for information purposes of the Educational course "The Ancient architecture".

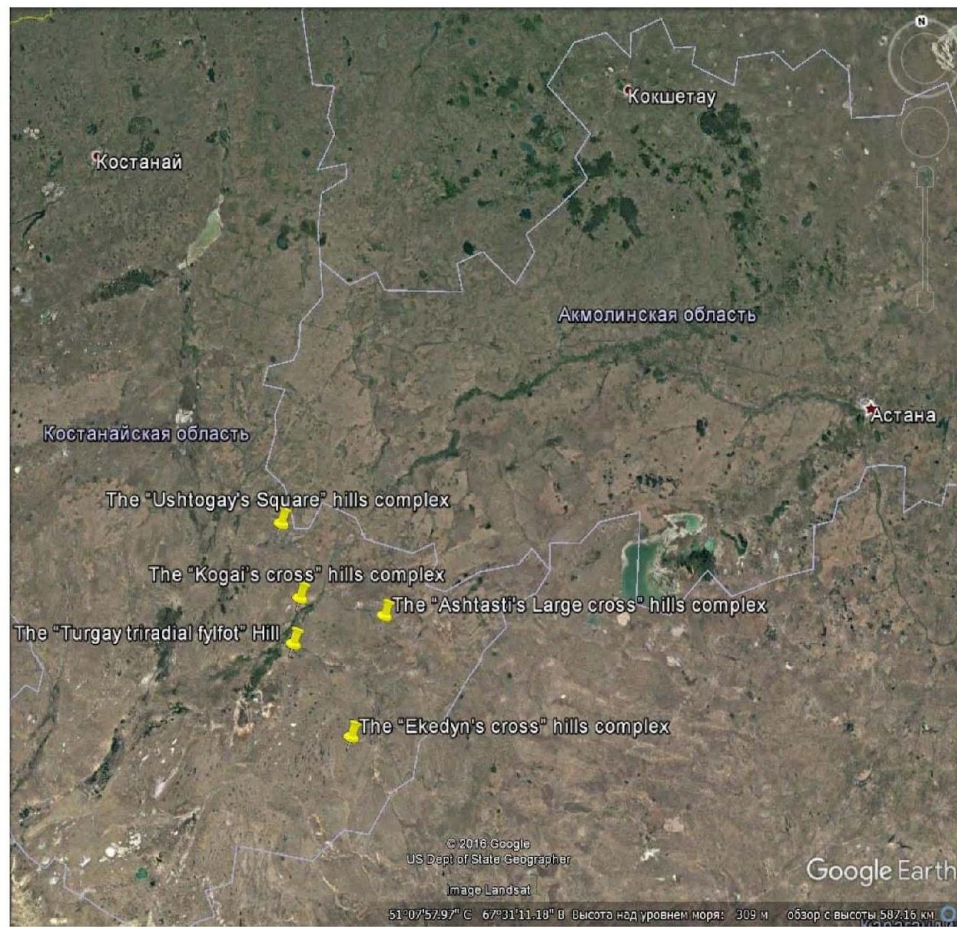
The front cover:

The Geoglyph "Turgay triradial fylfot" Hill – GoogleEarth Images: 09/07/2006 - <http://earth.google.com>

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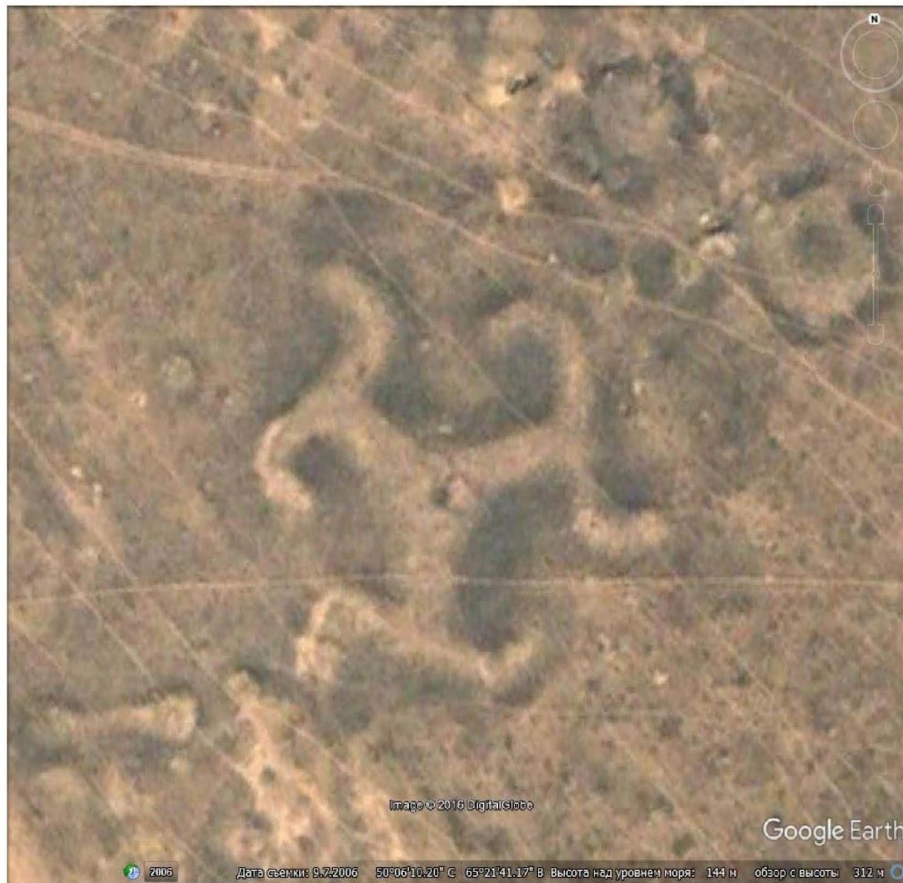
1. Most famous Kazakhstan's geoglyphs position ~ **Kostanay Region, Kazakhstan**



This geoglyphs were discovered in 2007 by **Dmitriy Dey**

Sources: GoogleEarth Images - <http://earth.google.com> ; http://devdi.narod.ru/images/home_1_00.png

2. The “Turgay triradial fylfot” Hill near Urpek, Kostanay Region, Kazakhstan (50°06'09.82"N, 65°21'40.90"E)



Overall dimensions: 95m x 95m

Sources: GoogleEarth Images: 09/07/2006 - <http://earth.google.com>

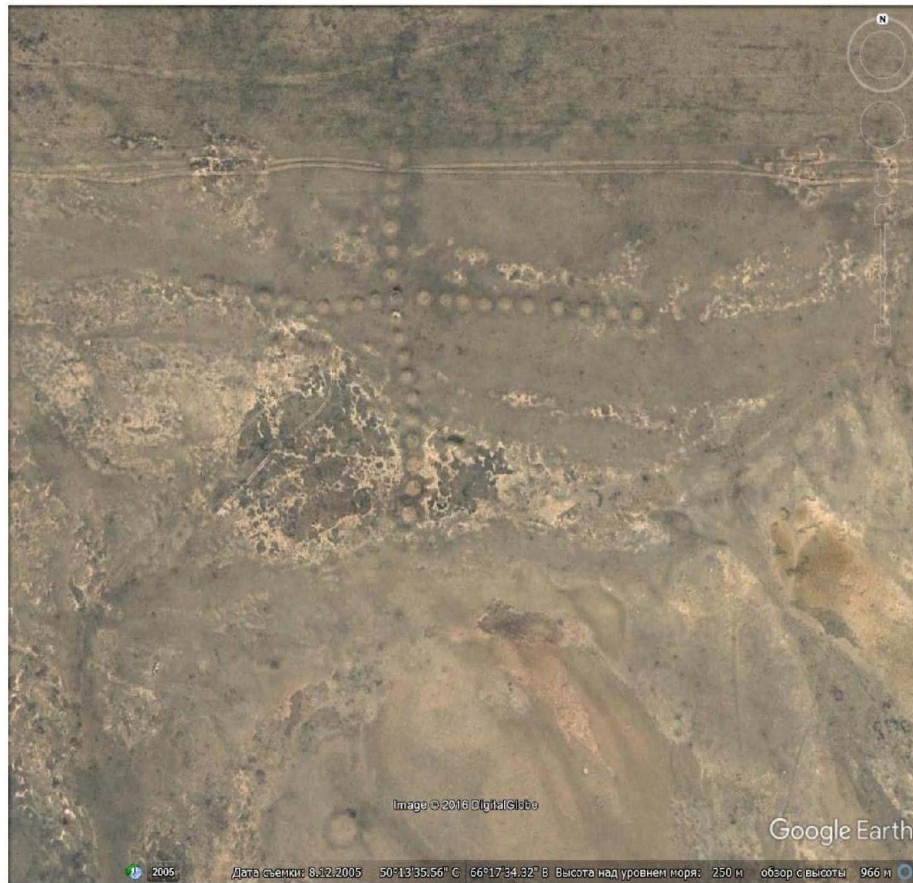
3. The “Ushtogay's Square” hills complex, Kostanay Region, Kazakhstan (50°49'58.48"N, 65°19'34.70"E)



Overall dimensions: 387m x 394m

Sources: GoogleEarth Images: 09/07/2006- <http://earth.google.com>

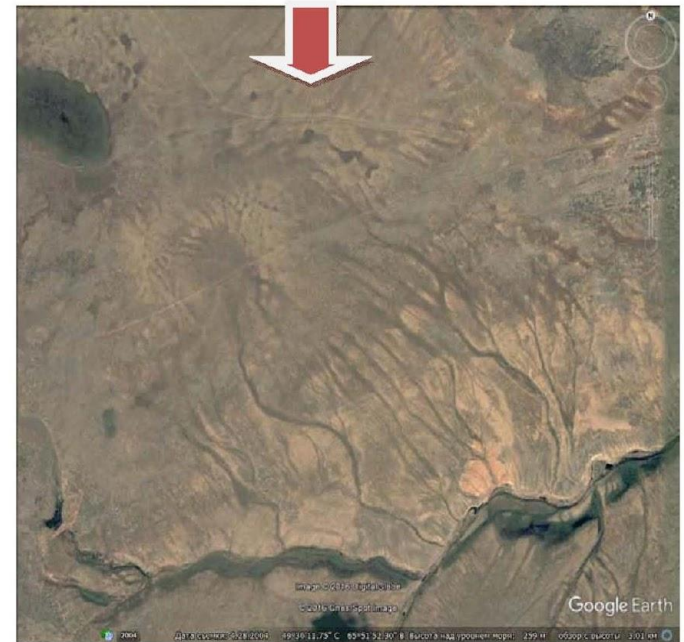
4. The “Ashtasti's Large cross” hills complex, Kostanay Region, Kazakhstan (50°13'39.62"N, 66°17'31.15"E)



Overall dimensions: 431m x 386m

Sources: GoogleEarth Images: 08/12/2005 - <http://earth.google.com>

5. The “Ekedyn's cross” hills complex, Kostanay Region, Kazakhstan (49°30'44.68"N, 65°51'44.09"E)



Overall dimensions: 249m x 229m

Sources: GoogleEarth Images: 04/28/2004 - <http://earth.google.com>

6. The “Kogai’s cross” hills complex, Kostanay Region, Kazakhstan (50°22'31.96"N, 65°27'43.98"E)



Overall dimensions: 280m x 212m

Sources: GoogleEarth Images: 05/09/2012 - <http://earth.google.com>

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7. Configuration features of Turgay's geoglyphs (Kostanay Region, Kazakhstan)

The "Ashtasti's Large cross" hills Complex

~ 50°13'39.62"N
~ 66°17'31.15"E



Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

The "Ekedyn's cross" hills Complex

~ 49°30'44.68"N
~ 65°51'44.09"E



Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

The "Kogai's cross" hills Complex

~ 50°22'31.96"N
~ 65°27'43.98"E



Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

The "Ushtogay's Square" hills Complex

~ 50°49'58.48"N
~ 65°19'34.70"E



Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

The "Turgay triradial flyfot" Hill and other hills Complex

~ 50°06'09.82"N
~ 65°21'40.90"E



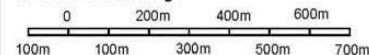
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Drawings by Dr. Konstantin I.Samoilov - October, 2016



Drawings are based
on Google Earth pictures
- <http://earth.google.com>

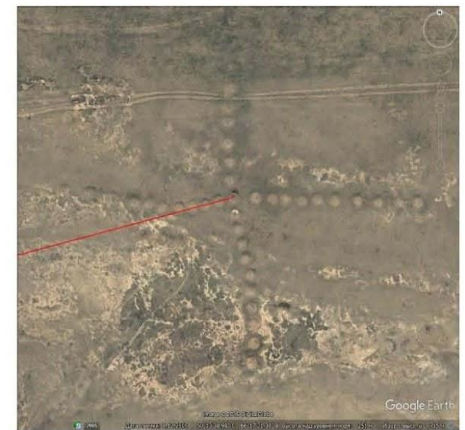
The relief specificity and modern roads
are not shown (conditionally)

The Scale of all drawings



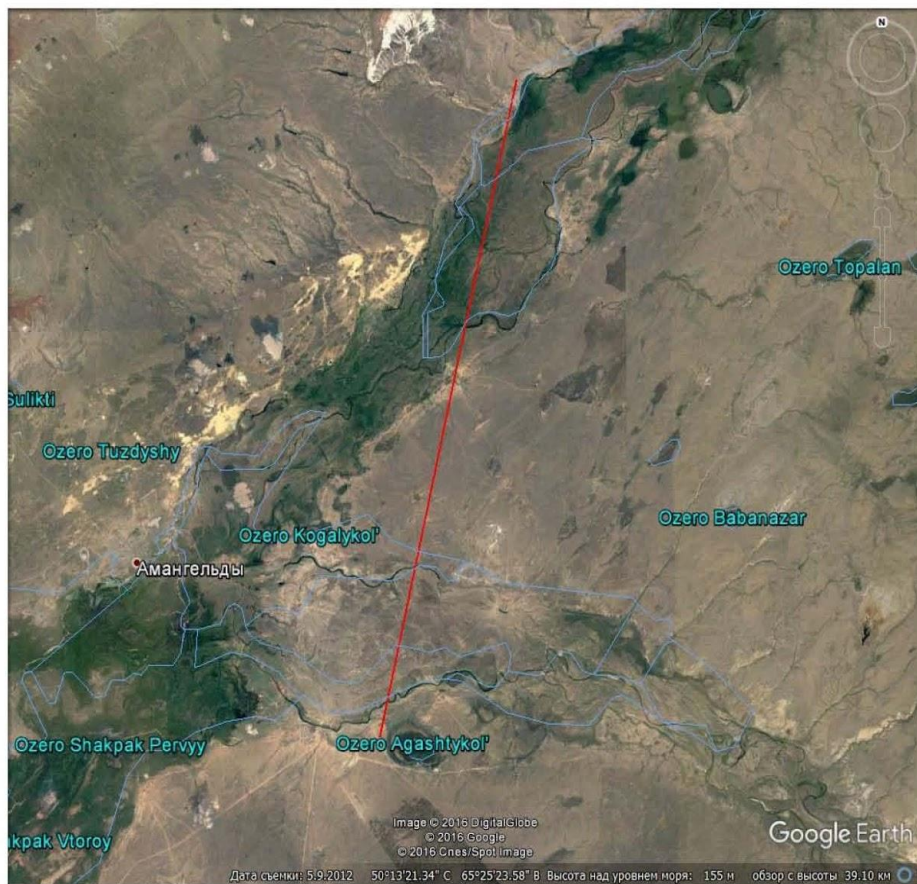
Sources: Drawing by Konstantin I.Samoilov, 2016; https://commons.wikimedia.org/wiki/File:Kazakhstan%27s_ancient_geoglyphs_schemes.jpg

8. The Geometric feature ~ The direction from the “Turgay triradial fylfot” Hill to the “Ashtasti's Large cross” hills complex: 77,81°; 67925 m (Kostanay Region, Kazakhstan)



Sources: GoogleEarth Images: 09/07/2006; 08/12/2005 - <http://earth.google.com> ; measurements by Konstantin I.Samoilov, 2016

9. The Geometric feature ~ The direction from the “Turgay triradial fylfot” Hill to the “Kogai’s cross” hills complex: 13,26°; 31189 m (Kostanay Region, Kazakhstan)



Sources: GoogleEarth Images: 09/07/2006 ; 08/12/2005 - <http://earth.google.com> ; measurements by Konstantin I.Samoilov, 2016

10. The Geometric feature ~ The direction from the “Ashtasti's Large cross” hills complex to the “Kogai's cross” hills complex: 285,93°; 61281 m (Kostanay Region, Kazakhstan)

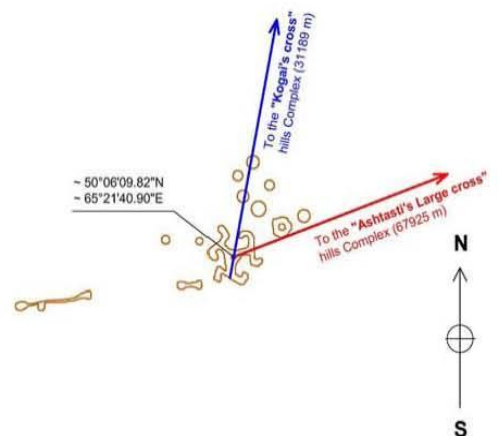


Sources: GoogleEarth Images: 05/09/2012; 08/12/2005 - <http://earth.google.com> ; measurements by Konstantin I.Samoilov, 2016

11. Geometric features of the "Turgay triradial fylfot", the "Ashtasti's Large cross" and the "Kogai's cross" hills complexes (Kostanay Region, Kazakhstan)

Geometric features

of the "Turgay triradial fylfot" Hill and other hills Complex
(Kostanay region, Kazakhstan)



Drawings are based
on Google Earth pictures
- <http://earth.google.com>

The Scale of the Drawing

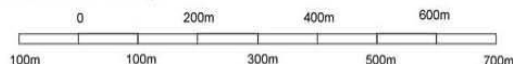
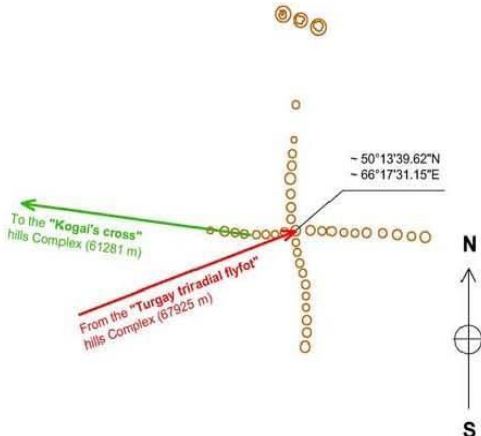


Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

Geometric features

of the "Ashtasti's Large cross" hills Complex
(Kostanay region, Kazakhstan)



Drawings are based
on Google Earth pictures
- <http://earth.google.com>

The Scale of the Drawing

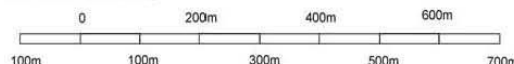
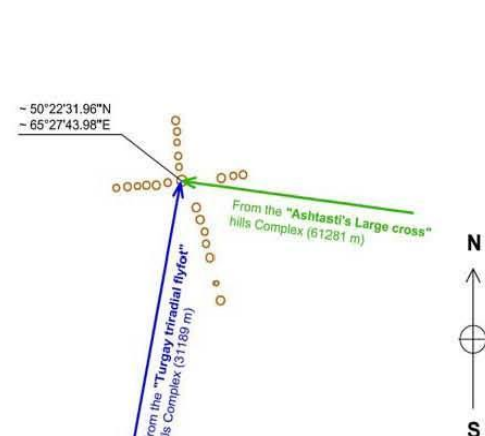


Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

Geometric features

of the "Kogai's cross" hills Complex
(Kostanay region, Kazakhstan)



Drawings are based
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- <http://earth.google.com>

The Scale of the Drawing

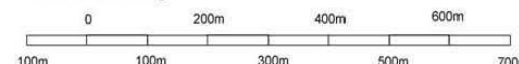


Image source:
Drawings by Dr. Konstantin I.Samoilov - October, 2016

Sources: https://commons.wikimedia.org/wiki/File:The_Kazakhstan%27s_geoglyph_%22Turgay_triradial_fylfot%22_hills_Complex_and_its_geometric_features.jpg ;
https://commons.wikimedia.org/wiki/File:The_Kazakhstan%27s_geoglyph_%22Ashtasti%27s_Large_cross%27_hills_Complex_and_its_geometric_features.jpg ;
https://commons.wikimedia.org/wiki/File:The_Kazakhstan%27s_geoglyph_%22Kogai's_cross%27_hills_Complex_and_its_geometric_features.jpg .

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Briefly about the Author



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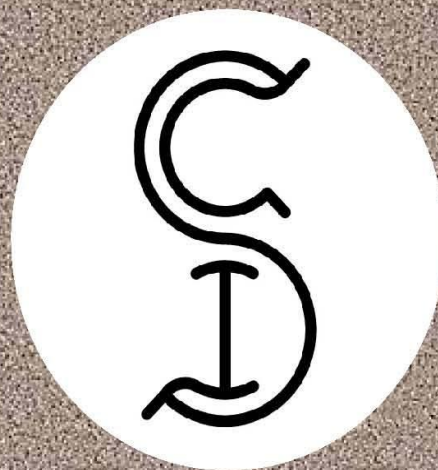
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