76. *Locally Trivial Displacements of Analytic Subvarieties with Ordinary Singularities*

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§0. **Introduction.** In [2] K. Kodaira studied on *locally trivial* displacements of a surface S with ordinary singularities in a threefold W, and proved that if S is "*semi-regular*" in W, then there exists an effectively parametrized maximal family of *locally trivial* displacements of S in W whose parameter space is non-singular. In [7] M. Namba proved the existence of the universal family of *locally trivial* displacements of surfaces with ordinary singularities. It is a problem to extend these results to higher dimensional cases. The purpose of this note is to outline our recent results on this problem. Details will be published elsewhere.

§1. **Analytic families of locally trivial displacements of analytic subvarieties with ordinary singularities.** "*Ordinary*" singularities are those of the image $\pi(X)\subset \boldsymbol{P}^m(\boldsymbol{C})$ of a non-singular algebraic manifold X embedded in a sufficiently higher dimensional projective space $\boldsymbol{P}^N(\boldsymbol{C})$ by a "*generic*" linear projection $\pi: \boldsymbol{P}^N(\boldsymbol{C})\to \boldsymbol{P}^m(\boldsymbol{C})$. In [4] J. N. Mather showed that if the pair (n, m) ($n=\dim X$) of positive integers belongs to so-called "*nice range of dimensions*" (in the case of $m=n+1$, the pair (n, m) is in the "*nice range of dimensions*" if and only if $n\leqq 14$), then the restriction $\pi|_X: X\to \boldsymbol{P}^m(\boldsymbol{C})$ to X of a "*generic*" linear projection $\pi: \boldsymbol{P}^N(\boldsymbol{C})\to \boldsymbol{P}^m(\boldsymbol{C})$ is a *locally* (*infinitesimally*) *stable holomorphic map* (for definition see [3]). Making use of J. N. Mather's results concerning *stable map-germs*, we can give all possible defining equations of ordinary singularities in the case of some dimensions. However, our arguments do not depend on explicit descriptions of ordinary singularities by local coordinates. So we adopt the following as the definition of an "*analytic subvariety with ordinary singularities*".

Definition 1. Let Z be a proper analytic subvariety of a pure dimension of a complex manifold Y, $\nu: X\to Z$ the normalization of Z, and let $f=\iota\circ\nu: X\to Y$ be the composition of the normalization $\nu: X\to Z$ and the inclusion map $\iota: Z\hookrightarrow Y$. We say Z is an *analytic subvariety with ordinary singularities of* Y if the following are satisfied:

(i) X is non-singular,

(ii) $f=\iota\circ\nu: X\to Y$ is a locally (infinitesimally) stable holomorphic map.

From now on, let Z be an irreducible analytic subvariety with ordinary singularities in a compact complex manifold Y, and let $f: X\to Y$ be the